#4 LTIP

APPLICATION FOR FINANCIAL ASSISTANCE

Revised 4/99

IMPORTANT: Please consult the "Instructions for Completing the Project Application" for assistance in completion of this form.

SUBDIVISION: Green Township **CODE #** 061-31752

DISTRICT NUMBER: 2 **COUNTY:** Hamilton **DATE:** 09/14/09

CONTACT: Fred B. Schlimm, Jr **PHONE#:** (513) 574-8832

(THE PROJECT CONTACT PERSON SHOULD BE THE INDIVIDUAL WHO WILL BE AVAILABLE DURING BUSINESS HOURS AND WHO CAN BEST ANSWER OR COORDINATE THE RESPONSE TO QUESTIONS)

FAX: (513) 598-3097 **E-MAIL:** fschlimm@greentwp.org

PROJECT NAME: Race and Bridgetown Intersection Improvement Project

SUBDIVISION TYPE
(Check Only 1)

___ 1. County
___ 2. City
X 3. Township
___ 4. Village
___ 5. Water/Sanitary District (Section 6119 or 6117 O.R.C.)

FUNDING TYPE REQUESTED
(Check All Requested & Enter Amount)

X 1. Grant $ 314,500
___ 2. Loan $ _____
___ 3. Loan Assistance $ _____

PROJECT TYPE
(Check Largest Component)

X 1. Road
___ 2. Bridge/Culvert
___ 3. Water Supply
___ 4. Wastewater
___ 5. Solid Waste
___ 6. Stormwater

TOTAL PROJECT COST: $ 629,000 **FUNDING REQUESTED:** $ 314,500

DISTRICT RECOMMENDATION

To be completed by the District Committee ONLY

2009 SEP 18 PM 3:00

HAMILTON COUNTY ENGINEER

GRANT: $ 314,500 **LOAN ASSISTANCE:** $

SCIP LOAN: $ _____ **RATE:** _____% **TERM:** _____ yrs.

RLP LOAN: $ _____ **RATE:** _____% **TERM:** _____ yrs.

(Check Only 1)

___ State Capital Improvement Program ___ Small Government Program

X Local Transportation Improvements Program

FOR OPWC USE ONLY

PROJECT NUMBER: C_____/C_____
Local Participation _____%
OPWC Participation _____%
Project Release Date _____
OPWC Approval _____

APPROVED FUNDING: $_____
Loan Interest Rate: _____%
Loan Term: _____years
Maturity Date: _____
Date Approved: _____
SCIP Loan _____ **RLP Loan** _____

1.0 PROJECT FINANCIAL INFORMATION

1.1 PROJECT ESTIMATED COSTS:
(Round to Nearest Dollar)

		TOTAL DOLLARS	Force Account Dollars
a.)	**Basic Engineering Services:**	$ 00 .00	
	Preliminary Design $		
	Final Design $		
	Bidding $		
	Construction Phase $		
	Additional Engineering Services *Identify services and costs below	$ 00 .00	
b.)	**Acquisition Expenses:** **Land and/or Right of Way**	$ 00 .00	
c.)	**Construction Costs:**	$ 629,000 .00	
d.)	**Equipment Purchased Directly:**	$ 00 .00	
e.)	**Permits, Advertising, Legal:** (Or Interest Costs for Loan Assistance Applications Only)	$ 00 .00	
f.)	**Construction Contingencies:**	$ 00 .00	
g.)	**TOTAL ESTIMATED COSTS:**	$ 629,000 .00	

***List Additional Engineering Services here:**
Service: **Cost:**

1.2 PROJECT FINANCIAL RESOURCES:

(Round to Nearest Dollar and Percent)

		DOLLARS	%
a.)	Local In-Kind Contribution	$ 00 .00	
b.)	Local Revenues	$ 314,500 .00	50%
c.)	Other Public Revenues		
	ODOT	$ .00	
	Rural Development	$ .00	
	OEPA	$ .00	
	OWDA	$ .00	
	CDBG	$ .00	
	OTHER _____	$ .00	
	SUBTOTAL LOCAL RESOURCES:	$ 314,500 .00	50%
d.)	OPWC Funds		
	1. Grant	$ 314,500 .00	50%
	2. Loan	$ .00	
	3. Loan Assistance	$ .00	
	SUBTOTAL OPWC FUNDS:	$ 314,500 .00	50%
e.)	TOTAL FINANCIAL RESOURCES:	$ **629,000** .00	**100%**

1.3 AVAILABILITY OF LOCAL FUNDS:

Attach a statement signed by the Chief Financial Officer listed in section 5.2 certifying all local share funds required for the project will be available on or before the earliest date listed in the Project Schedule section.

ODOT PID# _____ **Sale Date:** _____

STATUS: (Check One)

Traditional _____

Local Planning Agency (LPA) _____

State Infrastructure Bank _____

2.0 PROJECT INFORMATION

If the project is multi-jurisdictional, information must be consolidated in this section.

2.1 PROJECT NAME: Race and Bridgetown Intersection Improvement Project

2.2 BRIEF PROJECT DESCRIPTION – (Sections A through C):

A: SPECIFIC LOCATION:

Race Road- Beginning at the intersection of Bridgetown Road and extending to a point approximately 445' north of Bridgetown Road. Work to be limited to the northbound lanes (east side of the street). Bridgetown Road- Beginning at the intersection with Race Road and extending to a point approximately 260' east of Race Road. Work to be limited to the westbound lanes (north side of the street).

PROJECT ZIP CODE: 45211

B. PROJECT COMPONENTS:

See attachment.

C. PHYSICAL DIMENSIONS:

Race Road - At the present time the section of Race Road to be addressed in this project consists of one northbound lane, 11' in width. A second 11' wide northbound lane is to be constructed.

Bridgetown Road - At the present time the section of Bridgetown Road to be addressed in this project consists of one straight thru lane, 11' in width, and one left-turn lane, 10' in width. A designated 11' wide right-turn only lane is to be constructed for westbound motorists turning northbound onto Race Road.

D. DESIGN SERVICE CAPACITY:

Detail current service capacity versus proposed service level.

See attachment.

Road or Bridge: Current ADT 57,427 **Year:** 2008 **Projected ADT** 60,000 **Year:** 2039

Water/Wastewater: Based on monthly usage of 7,756 gallons per household, attach current rate ordinance. Current Residential Rate:$ _____ **Proposed Rate: $** _____

Stormwater: Number of households served: _____

2.3 USEFUL LIFE/COST ESTIMATE: Project Useful Life: _____ **Years.**

Attach Registered Professional Engineer's statement, with original seal and signature confirming the project's useful life indicated above and estimated cost.

3.0 REPAIR/REPLACEMENT or NEW/EXPANSION:

TOTAL PORTION OF PROJECT REPAIR/REPLACEMENT	**$** 629,000
TOTAL PORTION OF PROJECT NEW/EXPANSION	**$**

4.0 PROJECT SCHEDULE:*

	BEGIN DATE	END DATE
4.1 Engineering/Design:	10/01/08	12/31/09
4.2 Bid Advertisement and Award:	11/01/10	11/30/10
4.3 Construction:	07/01/11	12/31/11
4.4 Right-of-Way/Land Acquisition:	10/01/09	05/31/10

*** Failure to meet project schedule may result in termination of agreement for approved projects. Modification of dates must be requested in writing by the CEO of record and approved by the commission once the Project Agreement has been executed. The project schedule should be planned around receiving a Project Agreement on or about July 1st.**

5.0 PROJECT OFFICIALS:

5.1	**CHIEF EXECUTIVE OFFICER**	Kevin Celarek
	TITLE	Administrator
	STREET	6303 Harrison Avenue
	CITY/ZIP	Cincinnati, OH 45247
	PHONE	(513) 574-4848
	FAX	(513) 574-6260
	E-MAIL	kcelarek@greentwp.org
5.2	**CHIEF FINANCIAL OFFICER**	Thomas Straus
	TITLE	Fiscal Officer
	STREET	6303 Harrison Avenue
	CITY/ZIP	Cincinnati, OH 45247
	PHONE	(513) 574-4848
	FAX	(513) 574-6260
	E-MAIL	N/A
5.3	**PROJECT MANAGER**	Butch Nanney
	TITLE	Assistant Director of Public Services
	STREET	6303 Harrison Avenue
	CITY/ZIP	Cincinnati, OH 45247
	PHONE	(513) 574-8832
	FAX	(513) 598-3097
	E-MAIL	bnanney@greentwp.org

Changes in Project Officials must be submitted in writing from the CEO.

6.0 ATTACHMENTS/COMPLETENESS REVIEW:

Confirm in the blocks [ ] below that each item listed is attached.

[X] **A certified copy of the legislation by the governing body of the applicant authorizing a designated official to sign and submit this application and execute contracts. This individual should sign under 7.0, Applicant Certification, below.**

[X] **A certification signed by the applicant's chief financial officer stating all local share funds required for the project will be available on or before the dates listed in the Project Schedule section. If the application involves a request for loan (RLP or SCIP), a certification signed by the CFO which identifies a specific revenue source for repaying the loan also must be attached. Both certifications can be accomplished in the same letter.**

[X] **A registered professional engineer's detailed cost estimate and useful life statement, as required in 164-1-13, 164-1-14, and 164-1-16 of the Ohio Administrative Code. Estimates shall contain an engineer's original seal or stamp and signature.**

[X] **A cooperation agreement (if the project involves more than one subdivision or district) which identifies the fiscal and administrative responsibilities of each participant.**

[ ] **Projects which include new and expansion components and potentially affect productive farmland should include a statement evaluating the potential impact. If there is a potential impact, the Governor's Executive Order 98-VII and the OPWC Farmland Preservation Review Advisory apply.**

[X] **Capital Improvements Report: (Required by O.R.C. Chapter 164.06 on standard form)**

[X] **Supporting Documentation: Materials such as additional project description, photographs, economic impact (temporary and/or full time jobs likely to be created as a result of the project), accident reports, impact on school zones, and other information to assist your district committee in ranking your project. Be sure to include supplements which may be required by your *local* District Public Works Integrating Committee.**

7.0 APPLICANT CERTIFICATION:

The undersigned certifies: (1) he/she is legally authorized to request and accept financial assistance from the Ohio Public Works Commission as identified in the attached legislation; (2) to the best of his/her knowledge and belief, all representations that are part of this application are true and correct; (3) all official documents and commitments of the applicant that are part of this application have been duly authorized by the governing body of the applicant; and, (4) should the requested financial assistance be provided, that in the execution of this project, the applicant will comply with all assurances required by Ohio Law, including those involving Buy Ohio and prevailing wages.

Applicant certifies that physical construction on the project as defined in the application has NOT begun, and will not begin until a Project Agreement for this project has been executed with the Ohio Public Works Commission. Action to the contrary will result in termination of the agreement and withdrawal of Ohio Public Works Commission funding from the project.

KEVIN T. CELAREK, GREEN TWP. ADMINISTRATOR

Certifying Representative (Type or Print Name and Title)

Kevin T Celarek Sept 17, 2009

Original Signature/Date Signed

Engineer's Estimate

BRIDGETOWN/RACE/GLENWAY

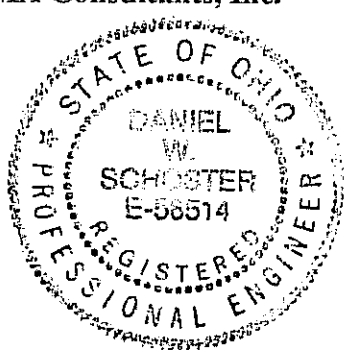
GREEN TOWNSHIP

DESCRIPTION	QUANTITY	UNIT	PRICE	COST
Excavation	600	CY	$ 20.00	$ 12,000.00
Undercutting	200	CY	$ 50.00	$ 10,000.00
Asphaltic Base	350	CY	$ 150.00	$ 52,500.00
Granular Base	350	CY	$ 50.00	$ 17,500.00
Asphalt Concrete	600	CY	$ 150.00	$ 90,000.00
Drive Aprons	150	SY	$ 50.00	$ 7,500.00
18" Storm	100	LF	$ 100.00	$ 10,000.00
Catch Basin, CB-3	4	EA	$ 2,000.00	$ 8,000.00
Sidewalk (remove & replace)	6000	SF	$ 6.00	$ 36,000.00
Curb, Type 6	1000	LF	$ 12.00	$ 12,000.00
Construction Layout	1	LS	$ 15,000.00	$ 15,000.00
Waterline Adjustment	1	LS	$ 20,000.00	$ 20,000.00
Seeding & Mulching	500	SY	$ 5.00	$ 2,500.00
Underdrain	1	LS	$ 5,000.00	$ 5,000.00
Maintain Traffic	1	LS	$ 30,000.00	$ 30,000.00
Utility Adjustments	1	LS	$ 30,000.00	$ 30,000.00
Pavement Planing	7000	SY	$ 2.00	$ 14,000.00
Loop Detectors	1	LS	$ 2,000.00	$ 2,000.00
Traffic Signal	1	LS	$ 50,000.00	$ 50,000.00
Pavement Striping	1	LS	$ 5,000.00	$ 5,000.00
Walls	2000	SF	$ 70.00	$ 140,000.00
Contingencies	1	LS	$ 60,000.00	$ 60,000.00
TOTAL ESTIMATED COST				**$ 629,000.00**

I hereby certify this to be an accurate estimate of the proposed project. The useful life of this project is 20 years.

Daniel W. Schoster, P.E.
JMA Consultants, Inc.

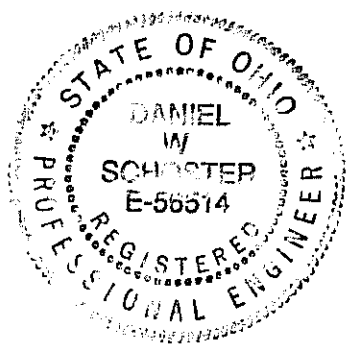
8/25/09
Date



CERTIFIED TRAFFIC COUNTS

I hereby certify that the **Race/Bridgetown/Glenway Intersection** in Green Township has a total of **57,427 users per day.**

Daniel W. Schoster, P.E.



Green Township Department of Public Services
Fred B. Schlimm Jr.
Director of Public Services
6303 Harrison Avenue • Cincinnati, Ohio 45247-7818
(513) 574-8832 • FAX (513) 598-3097 • E-mail: mainten@greentwp.org • www.greentwp.org

RESOLUTION # 09-0914-H
DIRECTING THE DIRECTOR OF PUBLIC SERVICES TO APPLY FOR FINANCIAL ASSITANCE IN 2010 FROM OHIO PUBLIC WORKS COMMISSION

BY THE BOARD:

WHEREAS, the Hamilton County Engineer has notified all Hamilton County Jurisdictions that the District #2 (Hamilton County) Integrating Committee will be accepting applications for 2010 Ohio Public Works Commission financial assistance through September 18, 2009; and

WHEREAS, the Director of Public Services feels the Bluebird Lane Reconstruction Project, Race and Bridgetown Roads Intersection Improvement Project and Taylor and Rybolt Roads Intersection Improvement Project will qualify for financial assistance; and

WHEREAS, the Director of Public Services prepared the following project construction cost estimates:

PROJECT NAME & STREET INCLUDED	EST. TWPS COST	EST. GRANT COST $	EST. TOTAL COST $
Bluebird Lane Reconstruction Project	$ 331,750	$ 331,750	$ 663,500
Race and Bridgetown Roads Intersection Improvement Project	$ 314,500	$ 314,500	$ 629,000
Taylor and Rybolt Roads Intersection Improvement Project	$ 369,803	$ 369,802	$ 739,605

NOW THEREFORE BE IT RESOLVED that this Board does hereby order its Director of Public Services to prepare the necessary application for Ohio Public Works Commission financial assistance in the amount of $1,016,052 and further directs its Administrator, as Chief Executive Officer for Green Township, to execute this application and submit it to the proper authorities.

ADOPTED AT THE REGULAR MEETING of the Board of Township Trustees of Green Township, Hamilton County, Ohio, the 14th day of September, 2009.

Mr. Linnenberg Yes Mr. Upton Yes Mrs. Winkler Yes

CERTIFICATE OF FISCAL OFFICER

IT IS HERBY CERTIFIED that the foregoing is a true and correct transcription of a resolution adopted by the Board of Trustees in session this 14th day of September, 2009.

Thomas J. Straus
Green Township Fiscal Officer
Hamilton County, Ohio

Green Township Department of Public Services
Fred B. Schlimm Jr.
Director of Public Services
6303 Harrison Avenue • Cincinnati, Ohio 45247-7818
(513) 574-8832 • FAX (513) 598-3097 • E-mail: mainten@greentwp.org • www.greentwp.org

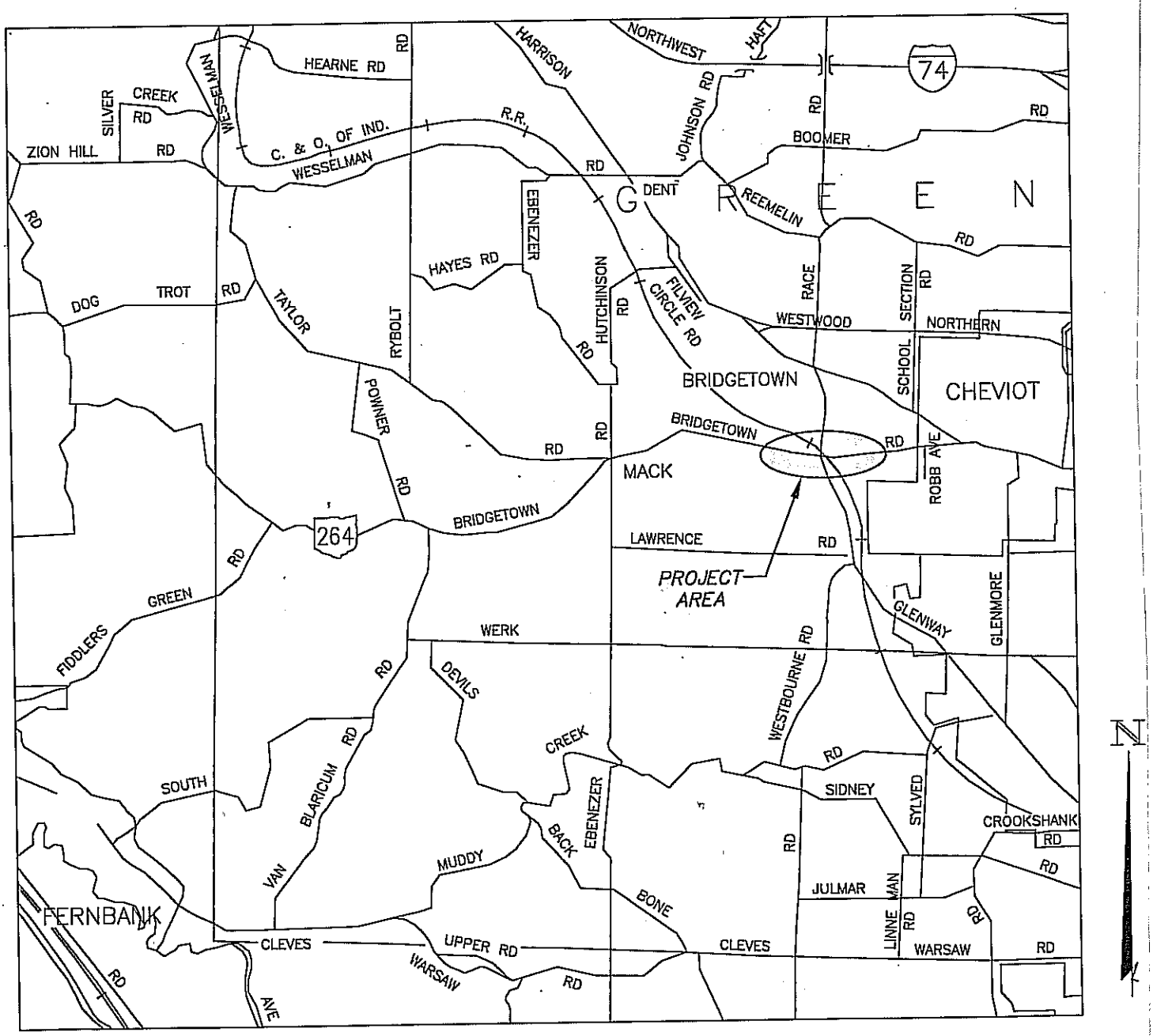
STATUS OF FUNDS REPORT

Project: Race & Bridgetown Roads Intersection Improvements Project

To Whom It May Concern,

Please allow this letter to certify that the sum of $314,500 is available as the local matching funds in connection with the application for the State Capital Improvements Program and Local Transportation Improvement Program Funds for the project noted above. The source of the local match will be the Green Township T.I.F. Fund. Local matching funds will be encumbered and certified upon completion of the Project Agreement with the Ohio Public Works Commission.

Thomas J. Straus
Green Township Fiscal Officer
Hamilton County, Ohio



VICINITY MAP

N.T.S.

RESOLUTION FOR THE PURPOSE OF HAMILTON COUNTY AND GREEN TOWNSHIP COOPERATING TO FACILITATE THE CONSTRUCTION OF INFRASTRUCTURE IMPROVEMENTS FOR THE PROJECTS KNOWN AS THE NORTH BEND ROAD INTERSECTIONS IMPROVEMENTS PROJECT AND THE RACE ROAD & HARRISON AVENUE INTERSECTION IMPROVEMENTS PROJECT IN GREEN TOWNSHIP, HAMILTON COUNTY, OHIO.

BY THE BOARD:

WHERERAS, it is desirable and in the public's interest for Hamilton County and Green Township to advance the development of improvement projects known as the North Bend Intersections Improvements and Race Road & Harrison Avenue Intersection Improvements Project, located in Green Township, Hamilton County, Ohio; and

WHEREAS, Hamilton County and Green Township desire to cooperate in the facilitation of the construction of improvements for the projects known as the North Bend Road Intersections Improvements Project and the Race Road & Harrison Avenue Intersection Improvements Project; and

WHEREAS, Hamilton County acknowledges that it is desirable and in the public's interest for Green Township to make application to the Ohio Public Works Commission (OPWC) for the North Bend Road Intersections Improvements Project and the Race Road & Harrison Avenue Intersection Improvements Project; and

WHEREAS, Hamilton County acknowledges that it is desirable and in the public's interest for Green Township to be the lead agent during the OPWC application process; and

WHEREAS, the Board of Trustees of Green Township have passed a Resolution stating that Green Township agrees to cooperate with Hamilton County, be the lead agent and file the application with the Ohio Public Works Commission for the North Bend Road Intersections Improvements Project and the Race Road & Harrison Avenue Intersection Improvements Project.

NOW, THEREFORE, BE IT RESOLVED that this Board of Hamilton County Commissioners of Hamilton County, Ohio hereby approve the adoption of this Resolution for the purpose of cooperating with Green Township and appointing Green Township as the lead agent to facilitate the filing of an application with OPWC and the construction of infrastructure improvements for the North Bend Road Intersections Improvements Project and the Race Road & Harrison Avenue Intersection Improvements Project, located in Green Township, Hamilton County, Ohio.

BE IT FURTHER RESOLVED, that the Clerk of this Board is hereby directed to certify a copy of this Resolution to the County Engineer's Office.

ADOPTED AT THE REGULAR MEETING of the Board of County Commissioners of Hamilton County, Ohio the 29th day of October 2008.

Mr. DeWine ABSENT EXCUSED Mr. Pepper YES Mr. Portune YES

CERTIFICATE OF CLERK

IT IS HEREBY CERTIFIED that the foregoing is a true and correct transcript of a Resolution adopted by this Board of County Commissioners of Hamilton County, State of Ohio, this 29th day of October, 2008.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official seal of the office of the Board of County Commissioners of Hamilton County, State of Ohio, this 29th day of October, 2008.

Jacqueline Panioto, County Clerk
Board of County Commissioners
Hamilton County, Ohio

JOINT AGREEMENT BETWEEN HAMILTON COUNTY AND GREEN TOWNSHIP FOR THE DESIGN OF THE IMPROVEMENTS, THE ACQUISITION OF RIGHT-OF-WAY/EASEMENTS AND THE CONSTRUCTION OF IMPROVEMENTS TO THE BRIDGETOWN ROAD, RACE ROAD & GLENWAY AVENUE INTERSECTION

PROJECT No. 500955

This JOINT AGREEMENT is entered into on this _____ day of _____, 200____, by and between the Board of County Commissioners of Hamilton County, Ohio, hereinafter referred to as the "COUNTY", on behalf of the Hamilton County Engineer, hereinafter referred to as the "ENGINEER", and the Board of Trustees of Green Township, Hamilton County, Ohio, hereinafter referred to as the "TOWNSHIP", acting by and through its duly authorized agent(s).

The COUNTY and the TOWNSHIP desire to improve the Bridgetown Road, Race Road and Glenway Avenue intersection, hereinafter referred to as the "PROJECT".

The COUNTY and the TOWNSHIP acknowledge that the PROJECT is required for, and conducive to, the orderly and efficient flow of traffic through the area and that the public will benefit by creating a joint project to complete the acquisition of right-of-way/easements and the construction of the PROJECT.

The PROJECT shall include the widening of the pavement, the rehabilitation of the existing pavement, the construction of curbs, the upgrading and improvement of the drainage systems and other pertinent miscellaneous improvements.

The COUNTY and/or the ENGINEER will:

1) review and approve the design of the improvements as plans are completed and submitted by the CONSULTANT, such approval shall not be unreasonably withheld.

2) authorize the TOWNSHIP to acquire the right-of-way and/or easements required for the construction of the PROJECT in the name of the Board of County Commissioners of Hamilton County, Ohio.

3) review and approve the proposed form to be used for the "Contract" to purchase any right-of-way and/or easements, said approval is not to be unreasonably withheld.

4) if an impasse is reached in the negotiations conducted by the TOWNSHIP, go through the necessary process to establish the PROJECT.

5) if the PROJECT is established, negotiate for and acquire through appropriation the easements and right-of-way on the parcels on which an impasse has been reached and that are necessary for the PROJECT.

6) if the PROJECT is established, upon either reaching a negotiated settlement or prior to filing an appropriation for the right-of-way and/or easement(s) necessary for the PROJECT, invoice the TOWNSHIP for the amount of reimbursement to the property owner or the amount to be filed with the court case.

7) accept the parcels acquired by the TOWNSHIP as the right-of-way or the easements necessary for the PROJECT.

8) prepare the quantity tabulation, specifications and bid documents.

9) administer the bidding process and, after receiving the bids, the ENGINEER shall complete the computation and analysis of the bids and determine the lowest and best bid according to the applicable sections of the ORC.

10) coordinate and administer the Construction Contract.

11) employ a qualified firm to complete all required testing on the PROJECT.

12) inspect the construction of the PROJECT improvements.

13) verify the quantities of work completed within the PROJECT.

14) be responsible for the total cost of the testing firm employed for the PROJECT.

15) be responsible for the TOTAL cost of the bidding and the administration of the construction of the PROJECT, e.g. advertising for bids, construction inspection, construction testing.

16) after the completion of the PROJECT and the final acceptance of the improvements, the COUNTY shall maintain and keep in repair the COUNTY road portions of the PROJECT as COUNTY roads, at no further expense to the TOWNSHIP.

The TOWNSHIP will:

1) prepare a Scope of Service and a Public Announcement of the Request for Statements of Qualifications from the Professional Design firms for the PROJECT.

2) select a Professional Design firm to complete the necessary design work for the PROJECT through the qualifications-based process in accordance with the applicable sections of the Ohio Revised Code (ORC).

3) negotiate a fee with the Professional Design firm to complete the design work for the PROJECT.

4) execute an AGREEMENT with the Professional Design Firm, hereinafter referred to as the "CONSULTANT", to complete the necessary design work for the PROJECT.

5) require the CONSULTANT to contact all local, state and/or federal agencies that may have jurisdiction over and regulations covering storm water, storm water facilities, creeks, streams, rivers and/or other drainage features; to determine if any special design considerations/issues/restrictions will have to be addressed during the preparation of the plans; to determine if these agencies will require a review of the plans and to determine if any special permits, e.g. 402/404 permits, will be required for the project.

6) administer the AGREEMENT and/or any approved and properly executed AMENDMENT to the AGREEMENT for the design work.

7) coordinate the reviewing of the plans by all necessary parties.

8) employ a qualified firm to complete all required geotechnical work on the PROJECT for the design of the PROJECT.

9) after receiving an invoice from the CONSULTANT, verify that the invoiced work has been completed and directly reimburse the CONSULTANT.

10) after receiving any request from the CONSULTANT for changes/modifications to the AGREEMENT, negotiate the scope of work and the additional fee for the AMENDMENT to the AGREEMENT and prepare the appropriate AMENDMENT.

11) be responsible for the execution of an AGREEMENT with a firm, hereinafter referred to as the "APPRAISER", to complete the appraisals necessary for the acquisition of the right-of-way and/or easements required for the construction of the PROJECT.

12) submit the proposed form to be used for the "Contract" to purchase any right-of-way and/or easements to the ENGINEER for review and approval prior to commencing the negotiation process with the affected property owners.

13) complete the title searches and the conveyance instruments necessary for the acquisition of the right-of-way and/or easements required for the construction of the PROJECT.

14) negotiate for and acquire the easements and right-of-way parcels that are necessary for the PROJECT.

15) be responsible for **ALL** of the costs involved in the design of the improvements.

16) be responsible for **ALL** of the costs involved in the acquisition of the right-of-way and/or easements required for the construction of the PROJECT, including the costs involved in obtaining the appraisals; the costs involved in obtaining the title searches; the payments made to the property owner(s) for the right-of-way and/or easements, whether acquired by negotiated settlement or through a court case; and court costs, if applicable.

17) be responsible for **ALL** of the costs involved in the construction of the PROJECT, over and above the funding obtained from other sources, e.g. SCIP/LTIP funds or ODOT funds.

The COUNTY and the TOWNSHIP further agree that:

1) the design and construction of this PROJECT as a Joint Project does **NOT** mean that either party to this JOINT AGREEMENT has accepted from or delegated to the other party or parties the responsibility and/or liability for the design and/or construction of those sections of the PROJECT completed within the other respective party's jurisdiction.

This JOINT AGREEMENT shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns.

IN WITNESS WHEREOF, the COUNTY and the TOWNSHIP have signed this JOINT AGREEMENT as indicated in their respective acknowledgements below.

GREEN TOWNSHIP:

By: _____
Kevin Celarek
Administrator

Approved as to Form:

By: _____
Law Director

HAMILTON COUNTY:

By: _____
William W. Brayshaw, P.E., P.S.
County Engineer

Board of County Commissioners, Hamilton County, Ohio:

By: _____
Patrick Thompson
Administrator

Approved as to Form:

By: _____
Assistant County Prosecutor

Administration Offices:
6303 Harrison Avenue
Cincinnati, Ohio 45247-7818

(513) 574-4848
Fax: (513) 574-6260
E-mail: admin@greentwp.org
Website:www.greentwp.org

GREEN TOWNSHIP Ohio
1809-2009 BICENTENNIAL

The attached draft of the Joint Agreement between Green Township and Hamilton County has been reviewed by the Green Township Attorney and officials of the Hamilton County Engineer's office. A resolution by the Green Township Board of Trustees approving their entering into of this joint agreement will be on the agenda for the September 28th meeting of the Green Township Board of Trustees. All three Trustees have expressed their intention to approve this agreement. Officials in the Hamilton County Engineer's office will be recommending that the Hamilton County Commissioners enter into this agreement as well.

Kevin T. Celarek
Green Township Administrator

Bridgetown Road
Westbound Lane

Bridgetown Road
Westbound Lane

Ruebel Place at Race Road
Vehicle parked at "Stop" Bar demonstrating insufficient sight distance

Ruebel Place at Race Road
Vehicle parked at "Stop" Bar demonstrating insufficient sight distance

Race Road
Northbound Lane

Race Road at Ruebel Place

Race Road near Glenway Avenue

Traffic backup at Glenway Avenue 3:30 pm

Traffic backup at Bridgetown Road
5:00 pm

Prepared for:

TEC Engineering, Inc.

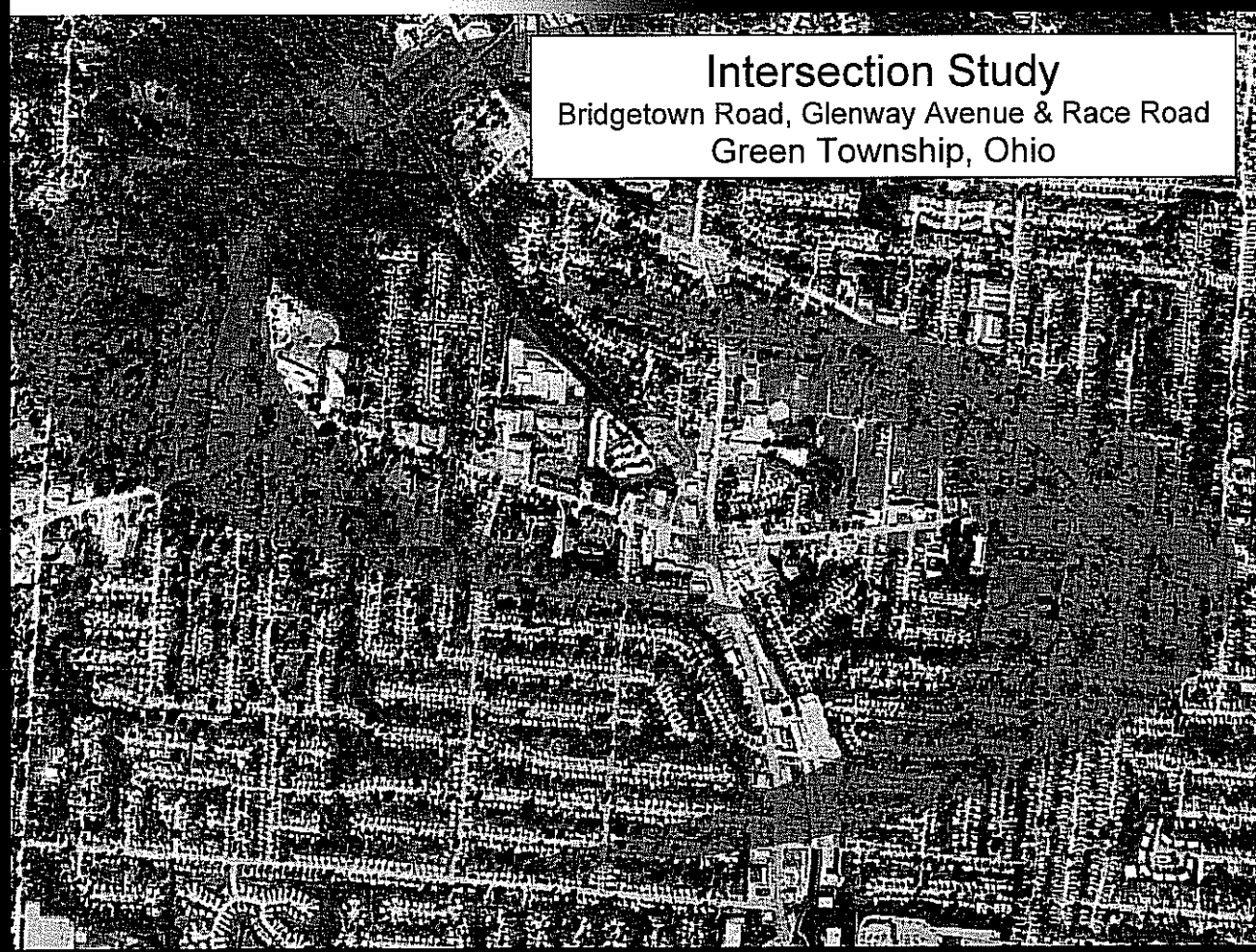
ENGINEERS
PLANNERS
SURVEYORS

Green Township
6303 Harrison Avenue
Cincinnati, OH 45247

September 2009
TEC PN – 09087-001

Intersection Study

Bridgetown Road, Glenway Avenue & Race Road
Green Township, Ohio



161 NORTHLAND BLVD SUITE A
CINCINNATI, OHIO 45246
513.771.8828
FAX: 513.771.0707

214 WEST MAIN ST
MASON, OHIO 45040
513.229.8829
FAX: 513.229.8840

77 W. ELMWOOD DRIVE
DAYTON, OHIO 45459
937.435.8828
FAX: 937.435.8833

Intersection Study

Intersection of Race Road, Glenway Avenue & Bridgetown Road
Hamilton County, Ohio

Prepared For:
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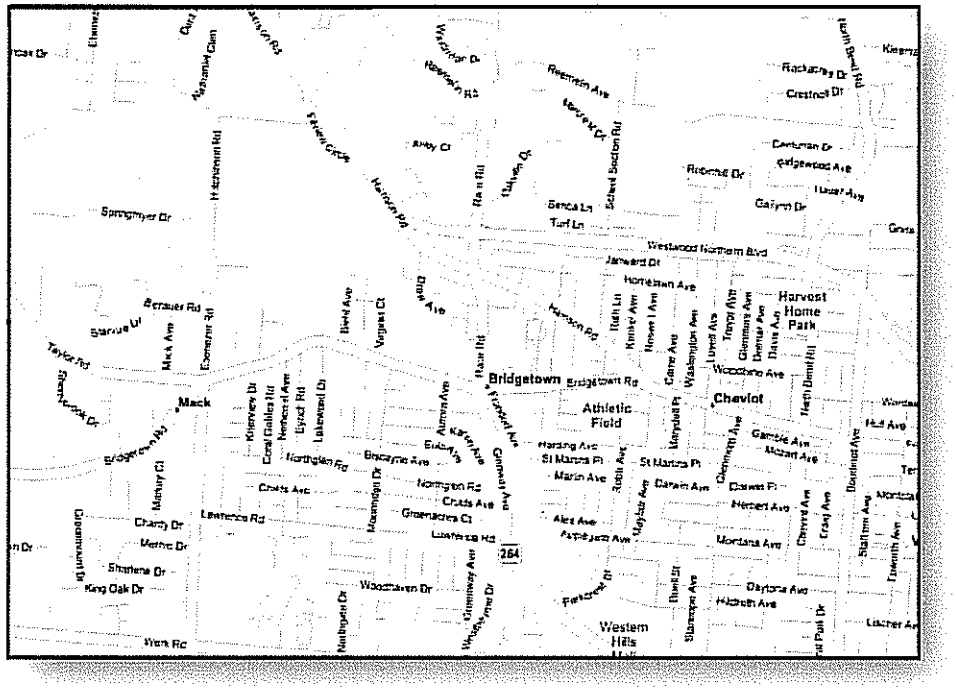

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Table of Contents

Figures

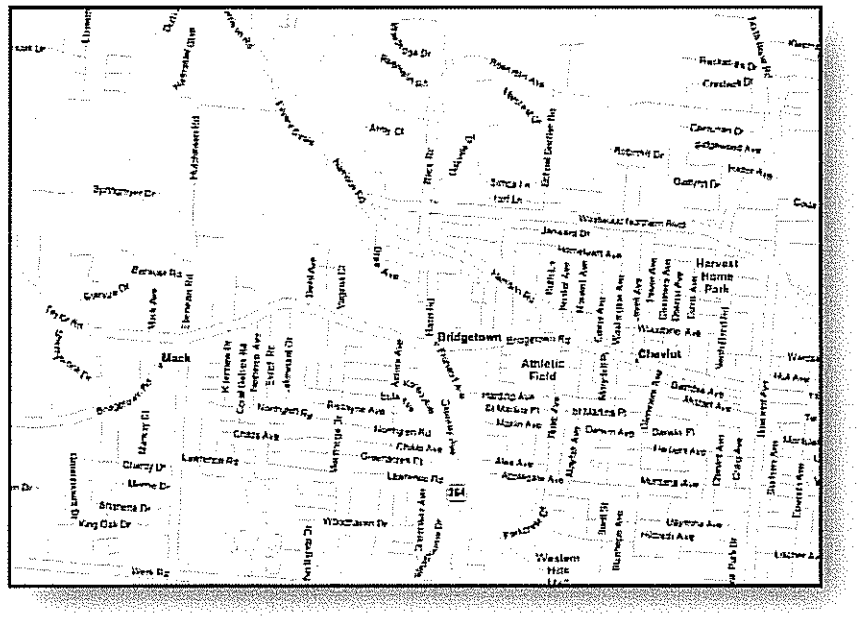
Tables

Appendices

I. EXISTING CONDITIONS

The intersection of Bridgetown Road with Glenway Ave/Race Road is a signalized intersection and located in Green Township. This study intersection is also part of the Hamilton County Regional Planning area. Glenway and Race Avenues are classified as Urban Major Arterials. Bridgetown Road is classified as a Urban Minor Arterial. Race Road is a major access to I-74 via Harrison Avenue. The west leg of Bridgetown Road also carries SR 264 to the west of the intersection and provides a connection to cities such as Cleves. SR 264 follows Glenway south of the intersection. Glenway can be used as a connector from downtown Cincinnati to Green Township. ***Figure 1*** shows a map of the location.

Figure 1: Vicinity Map



The eastbound approach has 11 foot lanes and consist of a left turn, a thru and a thru-right Lane. The Northbound approach has a left turn lane, a thru lane and a right turn lane. All lanes are 10 feet wide. Prior to the intersection there are two thru lanes. One of these ends at the intersection as the right turn lane. The westbound approach has a left turn lane and a thru-right lane. The lanes are 12 feet wide. A second thru lane ends at the intersection as the left turn lane. The southbound approach has a left turn lane, two thru lanes and a right turn lane. The right turn lane is 12 feet wide, the other lanes are 11 feet. ***Figure 2*** shows the existing conditions.

The ADT of this intersection was found to be approximately 45,000 vehicles per day. The intersection pictures can be found in ***Appendix A.***

This study also analyzes the capacity of the intersection of Race Road and Reubel Place. This is an unsignalized intersection. The eastbound and westbound traffic is stop controlled and the intersection is 200' north of Bridgetown Road. The volumes at this intersection are very low. The eastbound leg of the intersection is a driveway

which as access to the Walgreen Pharmacy as well as a restaurant. The eastbound approach, Ruebel Place is a residential street. Ruebel Place has an outlet on Bridgetown Road east of the Race Road.

Table 1 gives the hour volumes of the study intersections during the observed peak periods. ***Figure 3*** shows the peak hour turning movements for the intersection, and full traffic count data can be found in ***Appendix B***.

Table 1: Peak Hour Volumes

Intersection	Volumes	
	AM Peak (7:15-8:15)	PM Peak (5:00-6:00)
Race, Glenway & Bridgetown	2,668	3,331
Race & Reubel	1,545	1,997

Growth Rate:

The existing traffic was grown using a straight line rate of 0.8% for 30 years to obtain the forecasted traffic volumes for the year 2039. This rate was determined from a review of the population growth in the area between 1990 and 2000 provided by the Hamilton County Regional Planning Commission; and from a review of the Certified Traffic Volumes provided by the Ohio Department of Transportation. These volumes are also shown in ***Figure 3.***

Figure 2: Existing Conditions

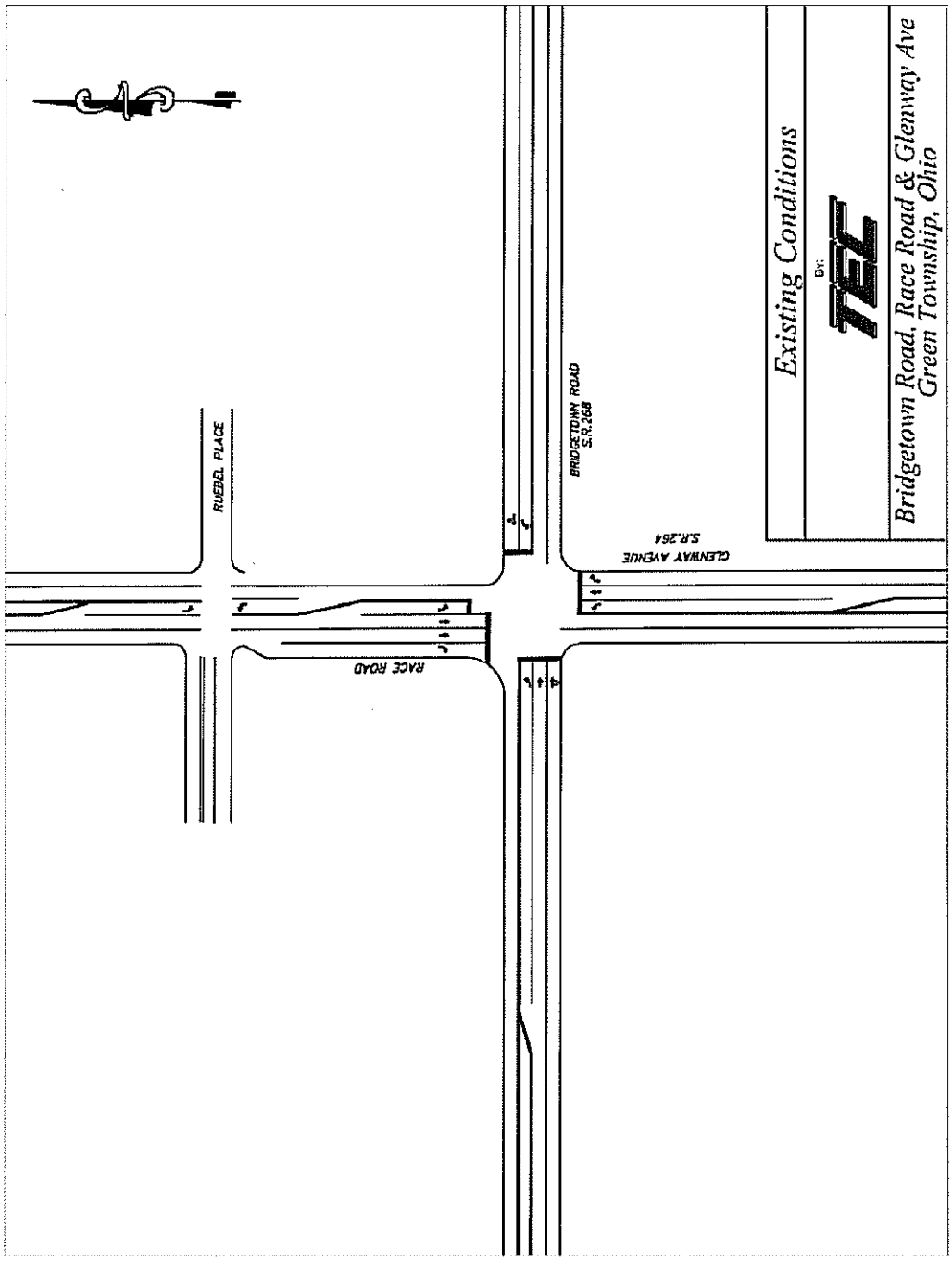
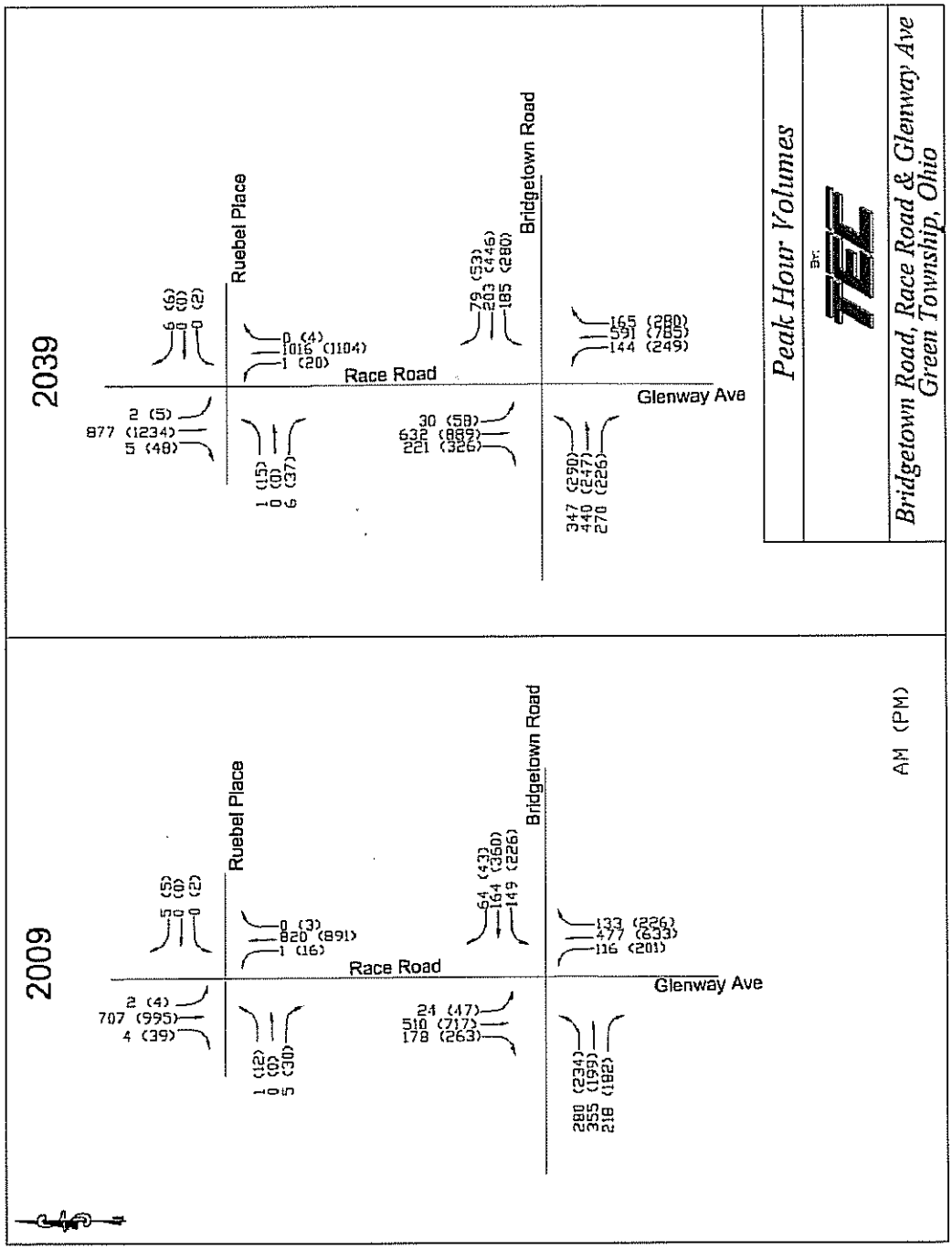


Figure 3: Turning Movements



II. CRASH SUMMARY

Crash data was acquired for the intersection of Race, Glenway and Bridgetown from 2006-2008. Since the intersection was recently rebuilt the number of accidents has been reduced significantly. A large portion of the accidents are rear end accidents. In 2008 there were 18 rear end crashes. Seven of these were in the southbound direction.

Crash data was also acquired for the intersection of Race and Ruebel. Between 2006-2007 there were only 2 accidents at the intersection, a left turn accident and a rear end accident. In 2008 there were 6 accidents at the intersection. Three of these were rear end accidents and 3 were left turn accidents. Of the 4 left turn accidents during the study period, 3 were eastbound left turn collisions with southbound thru vehicles.

III. ANALYSIS

A. Turn Lane Requirements

The Ohio Department of Transportation provides criteria to determine the length of a storage lane in the *Location and Design Manual, Volume One: Roadway Design.* Based on the 2039 volumes, each approach was analyzed for the existing and proposed turn lanes. The results are located below in ***Table 2*** and the turn lane warrants can be found in ***Appendix C.***

Table 2: Turn Lane Warrant Results

Approach	Lane	Turning Volume	Existing Length	Required Length	Meets Requirement
WB	Left Turn Lane	226	**	325'	**
	Right Turn Lane	79	n/a	200'	n/a
EB	Left Turn Lane	347	285'	425'	No
	Right Turn Lane	270	n/a	375'	n/a
SB	Left Turn Lane	47	200'	150'	Yes
	Right Turn Lane	263	250'	375'	No
NB	Left Turn Lane	201	260'	300'	No
	Right Turn Lane	226	**	325'	**

**Thru lanes that end as drop lanes at the intersection are not given existing lengths.

B. Capacity Analysis

The software program *Synchro* was used to analyze capacity at the intersection. *Synchro* uses the methods prescribed in the *Highway Capacity Manual (HCM)* to determine the level of service (LOS). LOS is defined in terms of delay and is a measure of driver discomfort and intersection performance with respect to vehicular capacity and quality of service provided to road users. Delay refers to total average stopped delay experienced by motorists at the referenced intersection. The level of service has six classifications ranging from A to F. These Classifications are shown in ***Table 3 and 4.***

Table 3: LOS at Unsignalized Intersections

Level Of Service	Description	Delay (seconds per vehicle)
A	Very low delay	0-10
B	Good progression	10-15
C	Limit of acceptable delay	15-25
D	Start of traffic breakdown	25-35
E	High delay	35-50
F	Congested conditions, unacceptable delay	>50

Table 4: LOS at Signalized Intersections

Level of Service	Description	Delay (seconds per vehicle)
A	Very low delay	<10
B	Good progression	10-20
C	Limit of acceptable delay	20-35
D	Start of traffic breakdown	35-55
E	High delay	55-80
F	Congested conditions, unacceptable delay	>80

The capacity analysis was done for several scenarios at the intersection. The analysis was completed for progressive improvement. For example, The first improvement is the addition of a Northbound Thru lane. This lane was then used in all sub sequential analyses. All of the capacity analysis was completed using the 2039 volumes. These volumes were forecasted using a 0.8% straight line growth rate.

At Race and Ruebel, the software HCS was used to analyze the unsignalized intersection. The 2039 analysis was completed with the assumption that the second northbound thru lane was added. Two scenarios were examined for the intersection. The first is to prohibit left turns from westbound Ruebel. The second scenario was to limit left turns from westbound Ruebel and to prohibit southbound left turns onto Ruebel. ***Tables 5 and 6*** show the results of the analysis. The complete Synchro and HCS reports can be found in ***Appendix D.***

Table 5: Capacity analysis-Bridgetown Glenway and Race

Bridgetown, Glenway and Race										
Existing										
	NB		SB		EB		WB		Total	
AM	19.5	B	20.2	C	28.6	C	29.2	C	24.0	C
PM	24.9	C	21.8	C	45.5	D	86.8	F	39.5	D
Optimized										
2009	NB		SB		EB		WB		Total	
AM	22.8	B	22.9	B	26.2	C	32.0	C	25.2	C
PM	39.8	D	29.4	C	36.1	C	48.5	D	37.3	D
2039	NB		SB		EB		WB		Total	
AM	32.5	C	27.0	C	37.7	D	44.2	D	34.4	D
PM	70.7	E	37.0	D	83.0	F	91.5	F	66.5	E
NB Thru Added										
2039	NB		SB		EB		WB		Total	
AM	25.9	C	29.7	C	33.8	C	40.0	D	31.4	C
PM	50.2	D	42.0	D	57.4	E	67.4	E	52.3	D
NB Thru + WB Right Added										
2039	NB		SB		EB		WB		Total	
AM	24.3	C	27.6	C	33.0	C	34.0	C	29.3	C
PM	48.0	D	40.3	D	51.5	D	53.9	D	47.4	D
NB Thru + WB Right + EB Right Added										
2039	NB		SB		EB		WB		Total	
AM	24.0	C	27.4	C	27.7	C	34.7	C	27.6	C
PM	48.1	D	40.4	D	49.4	D	52.4	D	46.8	D
NB Thru + WB Right + EB Right + NB Right										
2039	NB		SB		EB		WB		Total	
AM	21.9	C	28.6	C	27.5	C	34.5	C	27.3	C
PM	37.2	D	44.1	D	45.1	D	53.2	D	43.8	D
NB Thru + WB Right + EB Right + NB Right +WB Thru										
2039	NB		SB		EB		WB		Total	
AM	18.4	B	23.2	C	27.3	C	31.1	C	24.3	C
PM	26.0	C	33.9	C	39.0	D	39.7	D	33.5	C

Bridgetown and Race Capacity Analysis					
2011					
No Build					
	Delay/LOS				
	EB	WB	NB	SB	Total
AM	27.0 s/C	33.0 s/C	24.7 s/C	23.1 s/C	26.2 s/C
PM	41.8 s/D	51.2 s/D	37.8 s/D	30.7 s/C	38.9 s/D
Build					
	Delay/LOS				
	EB	WB	NB	SB	Total
AM	27.4 s/C	32.4 s/C	17.4 s/B	20.6 s/C	23.6 s/C
PM	31.4 s/C	39.1 s/D	29.5 s/C	32.7 s/C	32.7 s/C

*Build scenario includes NB thru and WB right

Table 6: Capacity analysis-Race and Ruebel

Race and Ruebel									
Existing									
2009	NB		SB		EB		WB		Total
AM	-	-	-	-	19.6	C	17.6	C	-
PM	-	-	-	-	71.9	F	30.9	D	-
2039	NB		SB		EB		WB		Total
AM*	-	-	-	-	17.1	C	12.5	B	-
PM*	-	-	-	-	65.6	F	39.3	E	-
Left-in & Right-in/Right-out (Ruebel only)									
2039	NB		SB		EB		WB		Total
AM	-	-	-	-	17.1	C	12.5	B	-
PM	-	-	-	-	65.6	F	13.1	B	-
Right-in/Right-out only (Ruebel only)									
2039	NB		SB		EB		WB		Total
AM	-	-	-	-	17.1	C	12.5	B	-
PM	-	-	-	-	63.3	F	13.1	B	-

* Contains 2nd NB Thru Lane

IV. RECOMMENDED COUNTERMEASURES AND COSTS

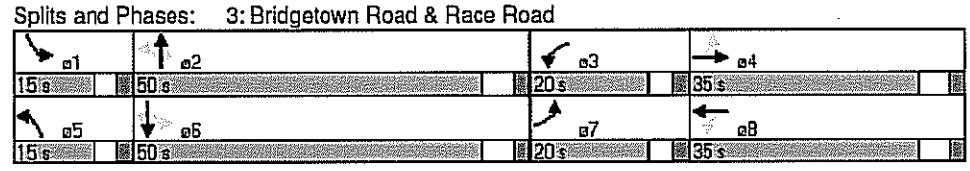
After examining all existing conditions, the following recommendations can be made. All recommendations are based on the 2039 volumes using an optimized signal timing pattern and cycle. The recommendations are cumulative, so the results for Improvement 2 assume that Improvement 1 was already completed.

Bridgetown, Race and Glenway:

Short Term Recommendations

The signal timing at the intersection should be revised. The recommended timing utilizes a 120 second cycle and is shown in ***Figure 4.***

Figure 4-Proposed Timing



Long Term Recommendations

The first recommended improvement is to add a northbound thru lane on Glenway Avenue. For the 2039 volume, this lane decreases the total delay by 21% in the PM peak and 9% in the AM peak.

The second recommendation is to add a westbound right turn lane. The westbound right turn volumes are the heaviest during the AM peak, with a turning volume 79 vehicles which is 17% of the approach traffic. This improvement reduces the delay 10% in the PM peak and 7% in the AM Peak. The westbound turn lane should be at least 200' including a 50' taper.

The other improvements that were reviewed include the following:

Addition of an eastbound right turn lane

Addition of a northbound right turn lane

Addition of a westbound thru lane

These improvements are not recommended. While they do improve the LOS and delay, the cost of adding the lanes is not justified by the small improvements. The delay is reduced by less than 7% for all improvements, with the exception of the westbound thru lane. The westbound thru lane is not recommended, despite the reduced delay, as the cost to continue the westbound thru on the west side of the intersection would be drastic because of the required right of way takes.

Several of the existing turn lanes do not meet the required length, as shown in ***Table 7.***

Table 7: Turn Lane Length

Approach	Lane	Existing Length	Required Length	Meets Requirement
EB	Left Turn Lane	285'	425'	No
SB	Right Turn Lane	250'	375'	No
NB	Left Turn Lane	260'	300'	No

The northbound left turn lane and eastbound left turn lane should be extended by simple restriping and will not require any pavement widening.

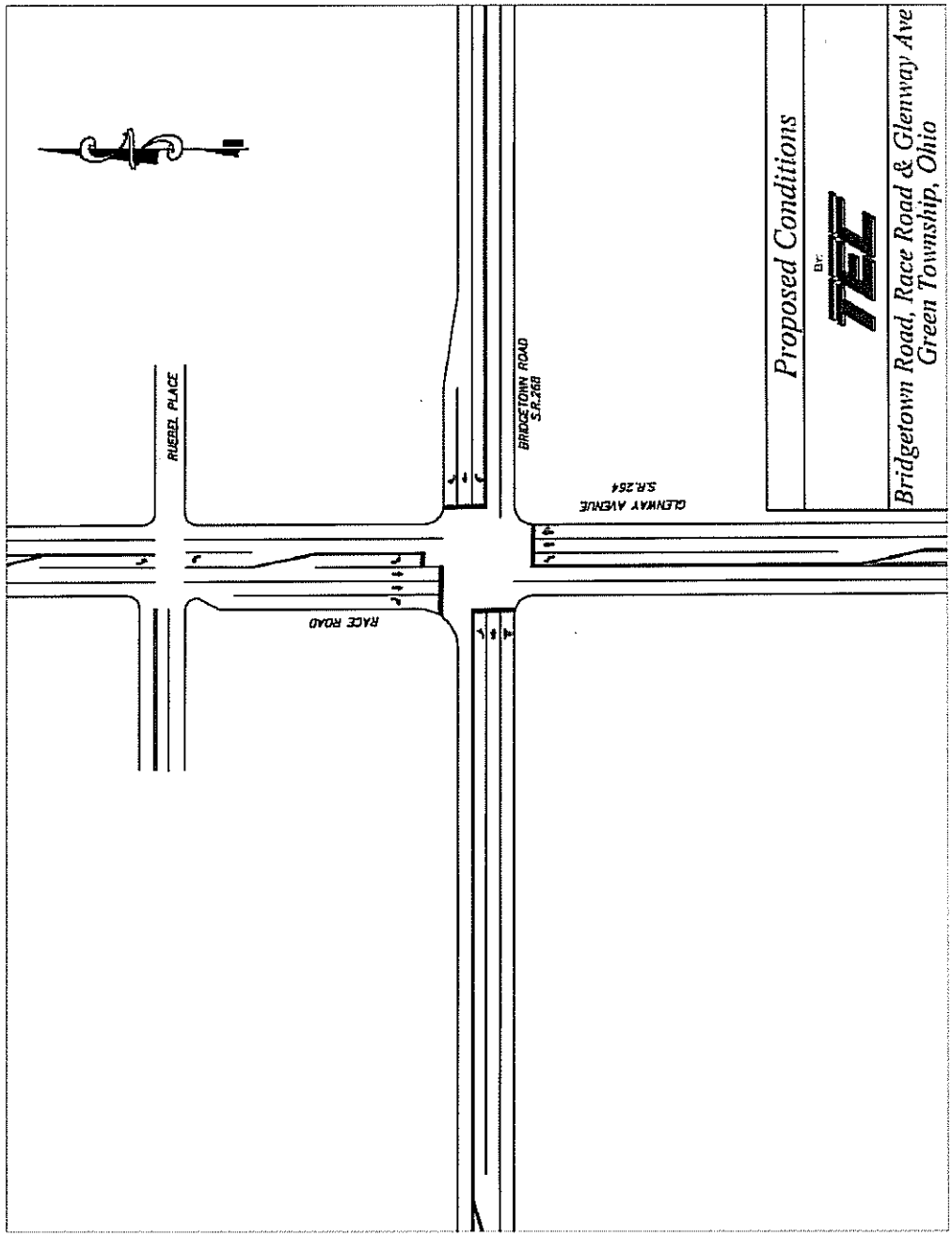
The southbound right turn lane cannot be extended due to the location of the Walgreen's drive and Ruebel Place.

Figure 5 shows the recommended improvements.

Race and Ruebel:

The intersection of Race and Ruebel experiences high delays. Eastbound and westbound delays are very high due to the volume of traffic on Race Road as well as the proximity to the signalized intersection. The eastbound and westbound traffic is stop controlled and the intersection is 200' north of Bridgetown Road. The addition of the northbound thru lane improves the delay and LOS for Walgreens drive. The westbound leg of the intersection was reviewed as a Right-out only and as a Right-in/Right-out only. This does not drastically reduce the delay at the intersection, therefore restricting movements for the westbound traffic is not recommended at this time.

Figure 5-Proposed Conditions



2008 Crash Report

William W. Brayshaw PE - PS *The Hamilton County Engineer's Traffic Department*

Source	Report #	Date	Day	Time	Twp	Address	Road	Intersects	Distance/Dir.	Inj	Ped	Fat	Crash Type	Comments
Hamco	4420	7/29/2008	TU	10:24	Gr	5500	Bridgetown SR 264	Glenway & Race	0	0	0	0	Rear End	EB - ACD
Hamco	1300	2/27/2008	WE	17:53	Gr	5500	Bridgetown SR 264	Glenway & Race	0	0	0	0	Rear End	SB - ACD
Hamco	1360	2/29/2008	FR	17:00	Gr	5500	Bridgetown SR 264	Glenway & Race	0	0	0	0	Left Turn	WB to SB into EB
Green	169	2/1/2008	FR	6:33	Gr	5500	Bridgetown SR 264	Glenway & Race	0	0	0	0	Left Turn	EB to NB into WB
Hamco	1819	3/21/2008	FR	21:23	Gr	5500	Bridgetown SR 264	Glenway & Race	0	0	0	0	Left Turn	WB to SB into EB
Green	449	3/20/2008	TH	19:00	Gr	5500	Bridgetown SR 264	Glenway & Race	0	0	0	0	Left Turn	WB to SB into EB
Hamco	4	1/1/2008	TU	18:50	Gr	5500	Bridgetown SR 264	Glenway & Race	0	0	0	0	Improper Baking	Back down WB lane
Hamco	4099	7/11/2008	FR	10:48	Gr	5500	Bridgetown SR 264	Glenway & Race	0	0	0	0	Rear End	WB - ACD
Green	1805	12/20/2008	SA	14:10	Gr	5500	Bridgetown SR 264	Glenway & Race	0	0	0	0	Rear End	EB - ACD
Hamco	4556	8/5/2008	TU	8:50	Gr	5500	Bridgetown SR 264	Glenway & Race	0	0	0	0	Rear End	WB - ACD
Green	1010	7/18/2008	FR	18:52	Gr	5500	Bridgetown SR 264	Glenway & Race	0	0	0	0	Sideswipe/Passing	EB improper lane chg
Green	1019	7/20/2008	SU	17:18	Gr	5500	Bridgetown SR 264	Glenway & Race	0	1	0	0	Rear End	WB-ACD mult.pileup
Hamco	5228	9/7/2008	SU	13:57	Gr	5500	Bridgetown SR 264	Glenway & Race	0	0	0	0	Angle	NB ran red into WB
Green	1250	9/8/2008	MO	16:02	Gr	5500	Bridgetown SR 264	Glenway & Race	0	0	0	0	Sideswipe/Passing	EB improper lane chg
Hamco	7311	12/8/2008	MO	10:54	Gr	5500	Bridgetown SR 264	Glenway & Race	0	0	0	0	Rear End	NB - ACD
Green	465	3/22/2008	SA	11:50	Gr	5500	Bridgetown SR 264	Glenway & Race	0	1	0	0	Left Turn	EB to NB into WB
Hamco	38	1/3/2008	TH	8:14	Gr	5501	Bridgetown SR 264	Glenway & Race	0	0	0	0	Rear End	SB - ACD

2008 Crash Report

William W. Brayshaw PE - PS *The Hamilton County Engineer's Traffic Department*

Source	Report #	Date	Day	Time	Twp	Address	Road	Intersects	Distance/Dir.	Inj	Ped	Fat	Crash Type	Comments
Green	700	5/10/2008	SA	15:31	Gr	3501	Race	Bridgetown & Glenway	0	0	0	0	Rear End	SB - ACD
Green	576	4/18/2008	FR	13:51	Gr	3501	Race	Bridgetown & Glenway	0	0	0	0	Rear End	SB - ACD
Green	1479	10/26/2008	SU	4:46	Gr	3801	Race	Bridgetown & Glenway	0	0	0	0	Fail to Control	NB into curb
Green	1451	10/21/2008	TU	15:45	Gr	3801	Race	Bridgetown & Glenway	0	0	0	0	Rear End	SB - ACD
Hamco	6027	10/16/2008	TH	7:55	Gr	3801	Race	Bridgetown & Glenway	0	0	0	0	Rear End	SB - ACD
Green	1086	8/2/2008	SA	0:12	Gr	3801	Race	Bridgetown & Glenway	0	0	0	0	Rear End	SB - ACD
Green	1077	8/1/2008	FR	20:30	Gr	3801	Race	Bridgetown & Glenway	0	0	0	0	Rear End	SB - ACD
Green	998	7/17/2008	TH	19:55	Gr	3801	Race	Bridgetown & Glenway	0	0	0	0	Sideswipe/Passing	SB Improper lane chg
Hamco	4643	8/8/2008	FR	0:30	Gr	3801	Race	Bridgetown & Glenway	0	0	0	0	Fail to Control	SB into barrels
Hamco	4491	8/1/2008	FR	11:41	Gr	3801	Race	Bridgetown & Glenway	0	0	0	0	Rear End	SB improper lane chg
Hamco	4381	7/24/2008	TH	22:29	Gr	3801	Race	Bridgetown & Glenway	0	0	0	0	Left Turn	NB to WB into SB
Hamco	966	2/14/2008	TH	14:56	Gr	3801	Race	Bridgetown & Glenway	0	0	0	0	Rear End	SB - ACD

2008 Crash Report

William W. Brayshaw PE - PS *The Hamilton County Engineer's Traffic Department*

Source	Report #	Date	Day	Time	Twp	Address	Road	Intersects	Distance/Dir.	Inj	Ped	Fat	Crash Type	Comments
Green	1763	12/12/2008	FR	18:13	Gr	6650	Glenway SR 264	Bridgetown & Race	0	2	0	0	Left Turn	NB to WB into SB
Hamco	6140	10/22/2008	WE	13:02	Gr	6650	Glenway SR 264	Bridgetown & Race	0	0	0	0	Sideswipe/Passing	NB improper lane chg
Hamco	5578	9/22/2008	MO	14:55	Gr	6650	Glenway SR 264	Bridgetown & Race	0	0	0	0	Sideswipe/Passing	NB improper lane chg
Hamco	5512	9/20/2008	SA	11:54	Gr	6650	Glenway SR 264	Bridgetown & Race	0	0	0	0	Rear End	NB - ACD
Green	666	5/3/2008	SA	12:14	Gr	6650	Glenway SR 264	Bridgetown & Race	0	0	0	0	Rear End	SB - ACD
Hamco	1757	3/19/2008	WE	13:59	Gr	6650	Glenway SR 264	Bridgetown & Race	0	0	0	0	Rear End	NB - ACD
Green	202	2/7/2008	TH	15:36	Gr	6650	Glenway SR 264	Bridgetown & Race	0	0	0	0	Rear End	NB - ACD
Green	181	2/4/2008	MO	12:07	Gr	6650	Glenway SR 264	Bridgetown & Race	0	0	0	0	Rear End	SB - ACD
Hamco	3	1/1/2008	TU	18:18	Gr	6650	Glenway SR 264	Bridgetown & Race	0	0	0	0	Fail to Control	NB into SB & EB

2008 Crash Report

William W. Brayshaw PE - PS *The Hamilton County Engineer's Traffic Department*

Source	Report #	Date	Day	Time	Twp	Address	Road	Intersects	Distance/Dir.	Inj	Ped	Fat	Crash Type	Comments
Green	1012	7/18/2008	FR	22:16	Gr	3828	Race	Ruebel	0	0	0	0	Rear End	NB - ACD
Green	513	4/2/2008	WE	15:00	Gr	3828	Race	Ruebel	0	0	0	0	Rear End	SB - ACD
Green	329	2/27/2008	WE	19:35	Gr	3828	Race	Ruebel	0	0	0	0	Fail to Control	NB into pole
Green	1845	12/24/2008	WE	17:20	Gr	3831	Race	Ruebel	25 N	0	0	0	Angle	EB ex.pr.dr.into SB
Hamco	7313	12/8/2008	MO	14:28	Gr	3831	Race	Ruebel	25 N	0	0	0	Angle	EB ex.pr.dr.into SB
Hamco	7016	11/29/2008	SA	10:33	Gr	3831	Race	Ruebel	25 N	0	0	0	Improper Backing	Pr.dr.into SB
Green	1294	9/16/2008	TU	15:36	Gr	3831	Race	Ruebel	25 N	0	0	0	Angle	EB ex.pr.dr.into SB
Green	1094	8/4/2008	MO	15:14	Gr	3831	Race	Ruebel	25 N	0	0	0	Angle	EB ex.pr.dr.into SB
Green	574	4/17/2008	TH	22:09	Gr	3853	Race	Ruebel	255 N	1	0	0	Rear End	SB - ACD

Calculations

The rankings in this report only reflect the frequency of crashes and not the rate of crashes. By using the number of crashes in conjunction with the average daily traffic through the intersection an Intersection Crash Rate may be calculated. As outlined in the Fifth Edition of the Traffic Engineering Handbook a rate per million entering vehicles can be calculated. This number can be used to give a more useful comparison of intersection crashes. Below is a comparison of the top ten intersections by both frequencies of crashes and by crash rate.

Intersection Crash Frequency:

Ranking	Intersection	Number of Crashes	Intersection ADT	Intersection Crash Rate	Number of Injuries
1	Race, Bridgetown & Glenway	39	57,427	1.86	4
2	Eight Mile & Beechmont SR 125	35	23,000	4.17	2
3	Winton & Galbraith	34	56,942	1.64	9
4	Mason, Governors Way & I-71 North	34	38,000	2.45	2
5	Houston, Hamilton & I-275 West	33	45,671	1.98	10
6	Springdale & Colerain	33	42,252	2.14	4
7	Ronald Reagan West & Colerain	31	34,953	2.43	1
8	Ridge & Highland	27	57,531	1.29	0
9	Kenwood & Montgomery	25	54,206	1.26	3
10	Harrison, Rybolt & I-74 East	25	47,496	1.44	4
11	Five Mile & Beechmont	25	57,531	1.19	0
12	Galbraith & Colerain	24	29,489	2.23	6
13	Dry Ridge, Colerain & Walmart	24	54,206	1.21	2

Intersection Crash Rate:

Ranking	Intersection	Number of Crashes	Intersection ADT	Intersection Crash Rate	Number of Injuries
1	Eight Mile & Beechmont SR 125	35	23,000	4.17	0
2	Mason, Governors Way & I-71 North	34	38,000	2.45	2
3	Ronald Reagan West & Colerain	31	34,953	2.43	3
4	Galbraith & Colerain	24	29,489	2.23	0
5	Springdale & Colerain	33	42,252	2.14	4
6	Houston, Hamilton & I-275 West	33	45,671	1.98	5
7	Race, Bridgetown & Glenway	39	57,427	1.86	9
8	Winton & Galbraith	34	56,942	1.64	4
9	Harrison & Race	22	41,481	1.45	10
10	Ridge & Highland	27	57,531	1.29	6
11	Kenwood & Montgomery	25	54,206	1.26	1
12	Dry Ridge, Colerain & Walmart	24	54,206	1.21	2
13	Five Mile & Beechmont	25	57,531	1.19	2

Crash Rate may be calculated using the following formula:

Rate per MEV = (number of Crashes * 1,000,000)/(24-hr total intersection entering volume*365)

ALL LOCATIONS

2008 INTERSECTION CRASHES TOP TEN

2008 RANK	INTERSECTION	CRASH #'S	INJ.	INJ. TYPE	FATAL	PED.	07/08 VARY	2007 RANK
#1	Race, Bridgetown & Glenway	39	4	3	0	0	-12	#1
#2	Eight Mile & Beechmont SR 125	35	2	2	0	0	+3	#5
#3	Winton & Galbraith	34	9	4	0	0	+1	#4
#3	Mason, Governors Way & I-71North	34	2	1	0	0	+16	NR
#4	Houston, Hamilton & I-275 West	33	10	7	0	1	+10	#2
#4	Springdale & Colerain	33	4	3	0	0	-10	#2
#5	Ronald Reagan West & Colerain US 27	31	1	1	0	0	+6	NR
#6	Ridge & Highland	27	0	0	0	0	+4	NR
#7	Kenwood & Montgomery	25	3	3	0	0	-9	#3
#7	Harrison, Rybolt & I-74 East	25	4	3	0	0	+6	NR
#7	Five Mile & Beechmont	25	0	0	0	0	-5	#7
#8	Galbraith & Colerain US 27	24	6	4	0	0	-5	#8
#8	Dry Ridge, Colerain & **Wal-Mart**	24	2	1	0	0	-2	#9
#9	Winton & Compton (North)	23	2	2	0	0	-8	#6
#10	Harrison & Race	22	5	3	0	0	+/1	NR
	FROM 2007 TOP TEN							
NR	Ronald Reagan East,Colerain & **Wal-Mart**	16	0	0	0	0	-10	#9
NR	Forest,Beechmont & **Towne Centre**	20	2	2	0	0	-5	#10

Note: NR = Not Ranked

Underlined = State Route
Beechmont = SR 125
Bridgetown = SR 264
Glenway = SR 264
Montgomery =US 22 & SR 3
Hamilton=US 127
Colerain = US 27

COUNTY & STATE INTERSECTIONS

2008 INTERSECTION CRASHES TOP TEN

2008 RANK	INTERSECTION	CRASH #'S	INJ.	INJ. TYPE	FATAL	PED.	07/08 VARY	2007 RANK
#1	Race, Bridgetown & Glenway	39	4	3	0	0	-12	#1
#2	Eight Mile & Beechmont	35	2	2	0	0	+3	#4
#3	Mason, Governors Way & I-71 North	34	2	1	0	0	+16	#9
#4	Houston, Hamilton & I-275 West	33	10	7	0	1	-10	#2
#4	Springdale & Colerain	33	4	3	0	0	-10	#2
#5	Ronald Reagan (West) & Colerain	31	1	1	0	0	+6	#8
#6	Kenwood & Montgomery	25	3	3	0	0	-9	#3
#6	Harrison, Rybolt & I-74 East	25	4	3	0	0	+7	#9
#6	Five Mile & Beechmont	25	0	0	0	0	-5	#5
#7	Galbraith & Colerain	24	6	4	0	0	-5	#6
#7	Dry Ridge, Colerain & **Wal-Mart**	24	2	1	0	0	-2	#7
#8	Forest, Beechmont & **Towne Centre**	20	2	2	0	0	-5	#8
#9	Mason,Montgomery & Symmescreek	18	3	2	0	0	+1	#10
#9	Compton & Colerain US 27	18	2	1	0	0	+4	NR
#10	Galbraith & Montgomery US 22-3	17	3	2	0	0	+1	NR
#10	Harrison & I-74 West Exit	17	4	2	0	0	+5	NR

Note: NR = Not Ranked

Underlined = State Route
Beechmont = SR 125
Bridgetown = SR 264
Glenway = SR 264
Montgomery =US 22 & SR 3
Hamilton=US 127
Colerain = US 27

2008 INTERSECTION CRASHES TOP TEN

2008 RANK	INTERSECTION	CRASH #'S	INJ.	INJ. TYPE	FATAL	PED.	07/08 VARY	2007 RANK
#1	Harrison, Hearne & **Kohl's**	20	3	2	0	0	+10	#2
#2	Galbraith, Mockingbird & Nieman	12	2	2	0	0	+6	#7
#2	Winton & Fontainebleau	12	3	2	0	0	+7	#8
#3	Fields Ertel & Waterstone & **Kohl's**	11	3	1	0	0	+4	#7
#4	Kenwood/St.Vincent & **Plaza**	9	2	2	0	0	-3	#2
#5	Winton, Lakeview & Valleyview	8	5	3	0	0	+1	#6
#5	Winton, Cloverview & **Kroger**	8	1	1	0	0	-4	#2
#6	Winton & Cherry Blossom	7	0	0	0	0	-1	#5
#6	Delhi, Glen Oaks & **Kroger**	7	1	1	0	0	+1	#7
#6	Galbraith & Central Park	7	5	3	0	0	+1	NR
#6	Kenwood & Orchard	7	0	0	0	0	-10	#1
#7	Winton & Hempstead	6	1	1	0	1	-1	#6
#7	Poole & Roundtop	6	0	0	0	0	-4	#3
#7	Harrison, Eaglesnest & Bluesky	6	2	1	0	0	+/-	#7
#7	Fields Ertel & Royal Pointe	6	1	1	0	0	+/-	#7
#7	North Bend & Sprucewood	6	0	0	0	1	+1	#8
#7	Galbraith & Beta	6	0	0	0	0	+4	NR
#7	Winton & Timber Trail	6	1	1	0	0	+3	NR
#7	Lawrence & Moonride	6	0	0	0	0	+6	NR
#7	Race & Ruebel	6	0	0	0	0	+5	NR
#7	Plainfield & Larchview	6	1	1	0	0	+2	NR
#7	Clough & Bruns	6	2	1	0	0	+4	NR

GREEN TOWNSHIP FIRE & EMS
6303 Harrison Avenue, Cincinnati, OH 45247
Phone: (513) 574-0474 Fax: (513) 574-8607
E-mail: fire@greentwp.org Website: www.greentwp.org

Douglas J. Witsken, Fire & EMS Chief

To: Fred Schlimm, Director of Public Services
From: Chief Douglas J. Witsken
Date: September 17, 2009
Subject: **Bridgetown Road, Race Road, and Glenway Avenue Intersection Improvement Plan**

I am writing to express my support for the proposed intersection improvements at the Bridgetown Road, Race Road, and Glenway Avenue intersection.

I am pleased to see this project proposed, as this intersection has been a major problem in Green Township for many years. It is obvious that it is becoming more of a problem with each passing year as traffic flow increases. The Department of Fire & EMS has two major problems with this intersection:

1. This intersection can not handle the volume of traffic that attempts to pass through it. Consequently, traffic backs up significantly and creates a constant log-jam to traffic flow. Passing through this intersection with emergency vehicles is difficult at best, and our response times to emergencies are delayed when we pass through this intersection.

2. The number of accidents at this intersection – I am aware that this intersection has the highest accident rate in our township and in the entire county. Our department responds to the accidents that involve injuries, and we have seen plenty of those type accidents at this location. There is no doubt that this has been one of the worse intersections in Green Township for accidents with injuries over the years.

Thank you for the opportunity to comment on this project - I strongly support your efforts to secure funding for the intersection improvements. This project will undoubtedly improve public safety in this area of Green Township.

Douglas J. Witsken

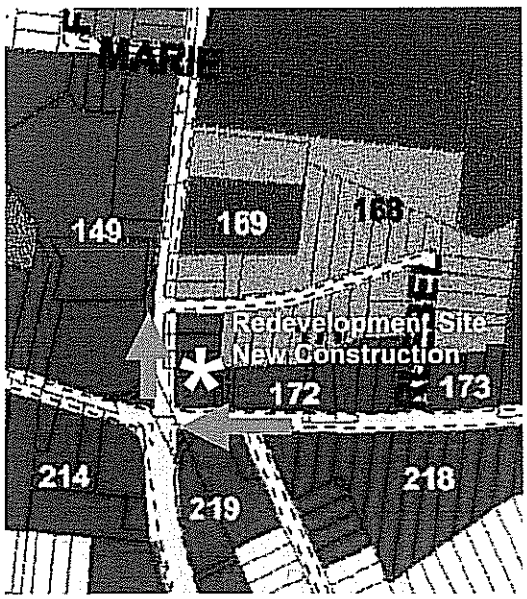
Chief Douglas J. Witsken
Green Township Fire & EMS

GREEN TOWNSHIP
DEPARTMENT OF DEVELOPMENT & PLANNING
SEPTEMBER 10, 2008

From: Adam Goetzman
To: Fred Schlimm
Copy: Trustees & File

Subject: **Race/Bridgetown/Glenway Intersection Improvement Project Development Impact**

The intersection is located in the within the boundary of the Green Township Land Use Plan Bridgetown Road Corridor. The location is identified as a distinct commercial node within the corridor. This unique area supports and reinforces the desirability of the surrounding residential area while providing both local and regional business opportunities oriented to community needs. This location also acts a gateway *(or capstone)* to more intense development further south on Glenway Avenue. This intersection plays two roles in the community, on one level it serves and a local retail and service business destination and secondly *(and more importantly if measured by traffic volume alone)* it is a major traffic distributor. The intersection funnels northbound traffic from the Cincinnati north and the commercial district on Glenway to residential neighborhoods, correspondingly traffic from the remaining compass points is routed through the intersection into the commercial district on Glenway Avenue.



The proposed intersection improvements will enhance the functional aspects of this intersection easing traffic flow through the intersection eliminating congestion on the westbound portion of Bridgetown and northbound Glenway. This is a critical enhancement for this intersection, business will benefit with improved functionality, capacity and safety. The reduction of peak hour traffic delays and general congestion in the intersection will improve access to existing businesses and make the area more attractive for redevelopment. Recent redevelopment south of the project (Glenway Dodge redevelopment) has not been replicated at this intersection in large part due to limited access because of a lack of appropriate dedicated turn lanes, which create long peak hour backups at the intersection. The pass through traffic will be better managed and will conflict less with local business traffic especially at peak hours and prime retail hours on Saturdays. Specifically the improvement will promote the redevelopment of the northeast corner of the intersection. This corner *(former site of the Wagon Wheel)* is partially vacant with adjacent parcels developed at levels far below that realized on the opposing corners. In the case of the adjoining car-wash there is virtually no employment currently generated by a site (corner) that in most communities would be considered a "prime retail" location. Redevelopment of this location will increase local employment.

The Green Township Land Use Plan (LUP) encourages appropriate redevelopment within the Township. The area is designated for future **General Retail** development. The localized congestion significantly limits access to existing commercial properties and inhibits redevelopment. The proposed project will improved capacity and enhance traffic patterns and safety in the area. This will improve access to existing properties and help promote redevelopment in accordance with existing plans.

ADDITIONAL SUPPORT INFORMATION

For Program Year 2010 (July 1, 2010 through June 30, 2011), applying agencies shall provide the following support information to help determine which projects will be funded. Information on this form must be accurate, and where called for, based on sound engineering principles. Documentation to substantiate the individual items, as noted, is required. The applicant should also use the rating system and its' addendum as a guide. The examples listed in this addendum are not a complete list, but only a small sampling of situations that may be relevant to a given project.

IF YOU ARE APPLYING FOR A GRANT, WILL YOU BE WILLING TO ACCEPT A LOAN IF ASKED BY THE DISTRICT? __✓__YES _____NO (ANSWER REQUIRED)
Note: Answering "Yes" will not increase your score and answering "NO" will not decrease your score.

1) What is the physical condition of the existing infrastructure that is to be replaced or repaired?

Give a statement of the nature of the deficient conditions of the present facility exclusive of capacity, serviceability, health and/or safety issues. If known, give the approximate age of the infrastructure to be replaced, repaired, or expanded. Use documentation (if possible) to support your statement. Documentation may include (but is not limited to): ODOT BR86 reports, pavement management condition reports, televised underground system reports, age inventory reports, maintenance records, etc., and will only be considered if included in the original application.

Both Race and Bridgetown Roads are in relatively good condition. Pavement cracking is present and curb is damaged in areas.

2) How important is the project to the safety of the Public and the citizens of the District and/or service area?

Give a statement of the projects effect on the safety of the service area. The design of the project is intended to reduce existing accident rate, promote safer conditions, and reduce the danger of risk, liability or injury. (Typical examples may include the effects of the completed project on accident rates, emergency response time, fire protection, and highway capacity.) Please be specific and provide documentation if necessary to substantiate the data. The applicant must demonstrate the type of problems that exist, the frequency and severity of the problems and the method of correction.

See attachment

3) How important is the project to the health of the Public and the citizens of the District and/or service area?

Give a statement of the projects effect on the health of the service area. The design of the project will improve the overall condition of the facility so as to reduce or eliminate potential for disease, or correct concerns regarding the environmental health of the area. (Typical examples may include the effects of the completed project by improving or adding storm drainage or sanitary facilities, etc.). Please be specific and provide documentation if necessary to substantiate the data. The applying agency must demonstrate the type of problems that exist, the frequency and severity of the problems and the method of correction.

Eliminating the extreme traffic congestion which is presently realized at this intersection will significantly reduce the amount of fluorocarbons emitted into the atmosphere.

4) **Does the project help meet the infrastructure repair and replacement needs of the applying jurisdiction?**

The applying agency must submit a listing in priority order of the projects for which it is applying. Points will be awarded on the basis of most to least importance.

Priority 1 Bluebird Lane Reconstruction Project
Priority 2 Race & Bridgetown Roads Intersection Improvements Project
Priority 3 Taylor & Rybolt Roads Intersection Improvements Project
Priority 4 _____
Priority 5 _____

5) To what extent will the user fee funded agency be participating in the funding of the project?

(example: rates for water or sewer, frontage assessments, etc.).

N/A

6) **Economic Growth – How will the completed project enhance economic growth**

Give a statement of the projects effect on economic growth.

See attachment.

7) **Matching Funds - LOCAL**

The information regarding local matching funds is to be filed by the applying agency in Section 1.2 (b) of the Ohio Public Works Association's "Application For Financial Assistance" form.

8) **Matching Funds - OTHER**

The information regarding local matching funds is to be filed by the applying agency in Section 1.2 (c) of the Ohio Public Works Association's "Application For Financial Assistance" form. If MRF funds are being used for matching funds, the MRF application must have been filed by **Monday, August 31, 2009** for this project with the Hamilton County Engineer's Office. List below all "other" funding the source(s).

9) Will the project alleviate serious capacity problems or respond to the future level of service needs of the district?

Describe how the proposed project will alleviate serious capacity problems (be specific).

See attachment.

Level of Service (LOS) calculations shall be for the improvements being made in the application. If this project is a phase of a larger project then any preceding phases shall be considered existing conditions for LOS calculations. Any future project phases shall not be considered as part of this applications LOS calculations.

For roadway betterment projects, provide the existing and proposed Level of Service (LOS) of the facility using the methodology outlined within AASHTO'S "Geometric Design of Highways and Streets" and the current edition of the Highway Capacity Manual.

No Build	Proposed Geometry
Current Year LOS C/D	Current Year LOS C/D
Design Year LOS E/F	Design Year LOS D

If the proposed design year LOS is not "C" or better, explain why LOS "C" cannot be achieved.

10) If SCIP/LTIP funds were granted, when would the construction contract be awarded?

If SCIP/LTIP funds are awarded, how soon after receiving the Project Agreement from OPWC (tentatively set for July 1 of the year following the deadline for applications) would the project be under contract? The Support Staff will review status reports of previous projects to help judge the accuracy of a jurisdiction's anticipated project schedule.

Number of months 6

a. Are preliminary plans or engineering completed? Yes ✓ No _____ N/A _____

b. Are details construction plans completed? Yes ✓ No _____ N/A _____

c. Are all utility coordination's completed? Yes ✓ No _____ N/A _____

d. Are all right-of-ways and easements acquired (if applicable) Yes _____ No ✓ N/A _____

If no, how many parcels needed for project? 6 Of these, how many are: Takes _____

Temporary 1

Permanent 5

For any parcels not yet acquired, explain the status of the ROW acquisition process for this project.

See attachment

e. Give an estimate of time needed to complete any item above not yet completed. 12 Months

11) Does the infrastructure have regional impact?

Give a brief statement concerning the regional significance of the infrastructure to be replaced, repaired, or expanded.

See attachment.

12) What is the overall economic health of the jurisdiction?

The District 2 Integrating Committee predetermines the jurisdiction's economic health. The economic health of a jurisdiction may periodically be adjusted when census and other budgetary data are updated.

13) Has any formal action by a federal, state, or local government agency resulted in a partial or complete ban of the usage or expansion of the usage for the involved infrastructure?

Describe what formal action has been taken which resulted in a ban of the use of or expansion of use for the involved infrastructure? Typical examples include weight limits, truck restrictions, and moratoriums or limitations on issuance of building permits, etc. The ban must have been caused by a structural or operational problem to be considered valid. Submission of a copy of the approved legislation would be helpful.

Will the ban be removed after the project is completed? Yes _____ No _____ N/A ✓

14) What is the total number of existing daily users that will benefit as a result of the proposed project?

For roads and bridges, multiply current Average Daily Traffic (ADT) by 1.20. For inclusion of public transit, submit documentation substantiating the count. Where the facility currently has any restrictions or is partially closed, use documented traffic counts prior to the restriction. For storm sewers, sanitary sewers, water lines, and other related facilities, multiply the number of households in the service area by 4. User information must be documented and certified by a Professional Engineer (signed and sealed).

Traffic: ADT 57,427 X 1.20 = 68,912 Users

Water/Sewer: Homes _____ X 4.00 = _____ Users

15) Has the jurisdiction enacted the optional $5 license plate fee, an infrastructure levy, a user fee, or dedicated tax for the pertinent infrastructure?

The applying jurisdiction shall list what type of fees, levies or taxes they have dedicated toward the type of infrastructure being applied for. (Check all that apply) Bonds are not eligible for points in this category.

Optional $5.00 License Tax ✓

Infrastructure Levy ✓ Specific type Street Levy

Facility Users Fee _____ Specific type _____

Dedicated Tax _____ Specific type _____

Other Fee, Levy, Tax _____ Specific type _____

ADDITIONAL SUPPORT INFORMATION

2. The intersection of Race/Bridgetown/Glenway was the intersection with the highest number of accidents occurring at it in all of Hamilton County in 2008. In 2008, there were thirty-nine crashes here, four of which involved injuries. This intersection was also the number one accident intersection in the county in 2007, when forty-four accidents were realized with seven injuries. Improvements constructed by ODOT in 2008 did little to reduce the number of accidents here as the decrease from 2007 to 2008 was only five accidents.

Many of these accidents were of rear-end and sideswipe variety and occurred on Glenway Avenue. At the present time, Glenway Avenue functions as a two-lane roadway in the northbound direction until it approaches the intersection with Race & Bridgetown Roads when the curb-lane becomes a right-turn only lane for eastbound Bridgetown Road. Motorists who are unaware of this lane change, or are simply inconsiderate and discourteous, often recklessly merge into the one lane that can proceed north onto Race Road. Completion of the second northbound lane on Race Road will see the right-turn only lane on Glenway Avenue restriped to become a straight thru-right-turn lane, thus eliminating these types of crashes.

Six accidents occurred at the intersection of Race Road and Ruebel Place. Sight distance to the south (towards Glenway Avenue) for motorists wishing to exit Ruebel Place is nearly non-existent. One must creep into the northbound travel lane of Race Road to achieve adequate sight distance, or they proceed blindly into Race Road. One of two options is being studied as the solution to problems here. The first would see the intersection at Ruebel Place closed. The second would see this intersection converted to a right in/right out only movement. Either of these two solutions will work to significantly decrease the number of accidents at this intersection.

Congestion at this intersection is among the worst in western Hamilton County. Backups in the northbound lanes of Glenway Avenue can extend for up to a half-mile. On Bridgetown Road, backups extend well beyond Ruebel Place during PM peak. Such conditions severely hamper emergency response times for emergency vehicles. The additional northbound lane to be constructed on Race Road will allow for two lanes of northbound Glenway Avenue traffic to proceed onto Race Road. The designated right-turn lane for westbound Bridgetown Road onto northbound Race Road will allow motorists to turn right to do so, even during red light signal phases. At the present time, this movement can be hampered by merely having one vehicle wishing to proceed straight thru onto westbound Bridgetown Road prohibit right-turn on red movements for many motorists who wish to do so. These two improvements will greatly enhance the ability of emergency vehicles to make their way quickly and safely through this intersection.

6. Traffic congestion in this area has stifled economic growth at and in the near vicinity of this intersection. Less than a half-mile from this intersection we recently realized the redevelopment of the old Glenway Dodge site. This same development group has expressed interest in redeveloping an assemblage of properties on the northeast corner of Race & Bridgetown Roads that would include the existing Gary's Cheese Cake and Car Wash businesses, as well as the vacant lot on the corner, owned by Green Township which was purchased for right-of-way for this project. At the present time this development group has no plans for redevelopment here due to traffic concerns. Having been made aware of these planned improvements, this developer is keeping their options open for these parcels. Please see the statement from Green Township's Development Director who offers a bit more information about this redevelopment project.

9. The current service capacity of the two legs, westbound and northbound, of this intersection to be addressed by this project is poor. The westbound lane is functioning during AM peak at an LOS of C with a 33 second delay, and in the PM peak an LOS of D with a 51.2 second delay. For the northbound lane, the LOS for AM peak is rated as C with a delay of 24.7 seconds, and for PM peak an LOS of D with a 37.5 second delay.

The improvements planned for his intersection will see improvements in LOS for these two legs realized. The westbound lane will see LOS retain a service level of C during the AM peak with marginal improvement in the delay time realized. During PM peak, while the service level remains at D, the delay time is reduced from 51.2 seconds to 39.1 seconds. For the northbound lane, AM peak LOS improves from a service level C with a 24.7 second delay, to an LOS of B, with the delay time reduced from 37.5 seconds to 29.5 seconds.

This project is being designed to provide acceptable levels of service for up to thirty years. Page nine of the Intersection Study undertaken for this project offers details as to the effect these improvements will have over the next thirty years. To summarize, if no improvements were to be made at this intersection the westbound and northbound legs of this intersection would be functioning at LOS of E & F respectively during PM peak in 2039. The improvements to be constructed will see the LOS stand at D for both legs in 2039.

Please see the Intersection Study included in the Other Supporting Documentation section of this application packet for more information.

11. Glenway Avenue and Race Road are classified as Urban Major Arterials. Bridgetown Road is classified as an Urban Minor Arterial. Race Road is a major access arterial to I-74 via Harrison Avenue. The west leg of Bridgetown Road also carries SR 264 to the west of the intersection and provides a connection to Miami Township and Cleves. SR 264 follows Glenway Avenue south of the intersection. Glenway can be used as a connector from downtown Cincinnati to Green Township.

2.2 B – Project Components:

Race Road- At the present time, only one northbound lane is in place on Race Road from Bridgetown Road to a point just north of Ruebel Place. An additional northbound lane is to be constructed to accommodate additional traffic resulting from the restriping of the right-turn only lane on northbound Glenway Avenue to create a straight thru/right-turn lane. This additional lane will be constructed to the current standards of the Hamilton County Engineer's office.

The intersection of Ruebel Place at Race Road will become either a limited access point of entry (right in/right out) or will be closed to traffic.

Bridgetown Road - A designated right-turn lane is to be constructed for westbound traffic to Race Road. This lane additional lane will be constructed to the current standards of the Hamilton County Engineer's office.

2.2 D – Design Service Capacity:

The current service capacity of the two legs, westbound and northbound, of this intersection to be addressed by this project is poor. The westbound lane is functioning during AM peak at an LOS of C with a 33 second delay, and in the PM peak an LOS of D with a 51.2 second delay. For the northbound lane, the LOS for AM peak is rated as C with a delay of 24.7 seconds, and for PM peak an LOS of D with a 37.5 second delay.

The improvements planned for his intersection will see improvements in LOS for these two legs realized. The westbound lane will see LOS retain a service level of C during the AM peak with marginal improvement in the delay time realized. During PM peak, while the service level remains at D, the delay time is reduced from 51.2 seconds to 39.1 seconds. For the northbound lane, AM peak LOS improves from a service level C with a 24.7 second delay, to an LOS of B, with the delay time reduced from 37.5 seconds to 29.5 seconds.

This project is being designed to provide acceptable levels of service for up to thirty years. Page nine of the Intersection Study undertaken for this project offers details as to the effect these improvements will have over the next thirty years. To summarize, if no improvements were to be made at this intersection the westbound and northbound legs of this intersection would be functioning at LOS of E & F respectively during PM peak in 2039. The improvements to be constructed will see the LOS stand at D for both legs in 2039.

Please see the Intersection Study included in the Other Supporting Documentation section of this application packet for more information.

SCIP/LTIP PROGRAM
ROUND 24 - PROGRAM YEAR 2010
PROJECT SELECTION CRITERIA
JULY 1, 2010 TO JUNE 30, 2011

NAME OF APPLICANT: Grant Township

NAME OF PROJECT: Rock and Bridgetown Intersection Improvement

RATING TEAM: 4

General Statement for Rating Criteria

Points awarded for all items will be based on engineering experience, field verification, application information and other information supplied by the applying agency, which is deemed to be relevant by the Support Staff. The examples listed in this addendum are not a complete list, but only a small sampling of situations that may be relevant to a given project.

CIRCLE THE APPROPRIATE RATING

1) **What is the physical condition of the existing infrastructure that is to be replaced or repaired?**

25 - Failed
23 - Critical
20 - Very Poor
17 - Poor
15 - Moderately Poor
10 - Moderately Fair
5 - Fair Condition
(0) - Good or Better

Appeal Score

_____

7

Criterion 1 - Condition

Condition of the particular infrastructure to be repaired, reconstructed or replaced shall be a measure of the degree of reduction in condition from its original state. Historic pavement management data based on ASTM D6433-99 rating system may be submitted as documentation. Capacity, serviceability, safety and health shall not be considered in this criterion. Any documentation the Applicant wishes to be considered must be included in the application package.

Definitions:

Failed Condition - requires complete reconstruction where no part of the existing facility is salvageable. (E.g. Roads: complete reconstruction of roadway, curbs and base; Bridges: complete removal and replacement of bridge; Underground: removal and replacement of an underground drainage or water system.

Critical Condition - requires partial reconstruction to maintain integrity. (E.g. Roads: reconstruction of roadway/curbs can be saved; Bridges: removal and replacement of bridge with abutment modification; Underground: removal and replacement of part of an underground drainage or water system.

Very Poor Condition - requires extensive rehabilitation to maintain integrity. (E.g. Roads: extensive full depth, partial depth and curb repair of a roadway with a structural overlay; Bridges: superstructure replacement; Underground: repair of joints and/or replacement of pipe sections.

Poor Condition - requires standard rehabilitation to maintain integrity. (E.g. Roads: moderate full depth, partial depth and curb repair to a roadway with no structural overlay needed or structural overlay with minor repairs to a roadway needed; Bridges: extensive patching of substructure and replacement of deck; Underground: insituform or other in ground repairs.

Moderately Poor Condition - requires minor rehabilitation to maintain integrity. (E.g. Roads: minor full depth, partial depth or curb repairs to a roadway with either a thin overlay or no overlay needed; Bridges: major structural patching and/or major deck repair.

Moderately Fair Condition - requires extensive maintenance to maintain integrity. (E.g. Roads: thin or no overlay with extensive crack sealing, minor partial depth and/or slurry or rejuvenation; Bridges: minor structural patching, deck repair, erosion control.)

Fair Condition - requires routine maintenance to maintain integrity. (E.g. Roads: slurry seal, rejuvenation or routine crack sealing to the roadway; Bridges: minor structural patching.)

Good or Better Condition - little to no maintenance required to maintain integrity.

Note: **If the infrastructure is in "good" or better condition, it will NOT be considered for SCIP/LTIP funding unless it is an expansion project that will improve serviceability.**

2) **How important is the project to the safety of the Public and the citizens of the District and/or service area?**

25 - Highly significant importance
20 - Considerably significant importance
15 - Moderate importance
10 - Minimal importance
5 – Poorly documented importance
0 - No measurable impact

Appeal Score _____

15 correctable 2008
1 injury
Accident Rate = 2.1

Criterion 2 – Safety

The applying agency shall include in its application the type of deficiency that currently exists and how the intended project would improve the situation. For example, have there been vehicular accidents attributable to the problems cited? Have they involved injuries or fatalities? In the case of water systems, are existing hydrants non-functional? In the case of water lines, is the present capacity inadequate to provide volumes or pressure for adequate fire protection? **In all cases, specific documentation is required.** Mentioned problems, which are poorly documented, generally will not receive more than 5 points.

Note: Each project is looked at on an individual basis to determine if any aspects of this category apply. **Examples given above are NOT intended to be exclusive.**

3) **How important is the project to the health of the Public and the citizens of the District and/or service area?**

25 - Highly significant importance
20 - Considerably significant importance
15 - Moderate importance
10 - Minimal importance
5 - Poorly documented importance
0 - No measurable impact

Appeal Score _____

Criterion 3 – Health

The applying agency shall include in its application the type, frequency, and severity of the health problem that would be eliminated or reduced by the intended project. For example, can the problem be eliminated only by the project, or would routine maintenance be satisfactory? If basement flooding has occurred, was it storm water or sanitary flow? What complaints if any are recorded? In the case of underground improvements, how will they improve health if they are storm sewers? How would improved sanitary sewers improve health or reduce health risk? **In all cases, quantified documentation is required.** Mentioned problems, which are poorly documented, generally will not receive more than 5 points.

Note: Each project is looked at on an individual basis to determine if any aspects of this category apply. **Examples given above are NOT intended to be exclusive.**

4) **Does the project help meet the infrastructure repair and replacement needs of the applying agency?**
Note: Applying agency's priority listing (part of the Additional Support Information) must be filed with application(s).

25 - First priority project
20 - Second priority project
15 -Third priority project
10 - Fourth priority project
5 - Fifth priority project or lower

Appeal Score _____

Criterion 4 – Jurisdiction's Priority Listing

The applying agency must submit a listing in priority order of the projects for which it is applying. Points will be awarded on the basis of most to least importance. The form is included in the Additional Support Information.

5) **To what extent will a user fee funded agency be participating in the funding of the project?**

(10) **Less than 10%**
9 – 10% to 19.99%
8 – 20% to 29.99%
7 – 30% to 39.99%
6 – 40% to 49.99%
5 – 50% to 59.99%
4 – 60% to 69.99%
3 – 70% to 79.99%
2 – 80% to 89.99%
1 – 90% to 95%
0 – Above 95%

Appeal Score _____

Criterion 5 – User Fee-funded Agency Participation
To what extent will a user fee funded agency be participating in the funding of the project? (Example: rates for water or sewer, frontage assessments, etc.). The applying agency must submit documentation.

6) **Economic Growth – How the completed project will enhance economic growth (See definitions).**

10 – The project will directly secure new employment
(5) **The project will permit more development**
0 – The project will not impact development

?

Appeal Score _____

Criterion 6 – Economic Growth
Will the completed project enhance economic growth and/or development?

Definitions:

Secure new employment: The project as designed will secure development/employers, which will immediately add new permanent employees. The applying agency must submit details.

Permit more development: The project as designed will permit additional business development/employment. The applying agency must supply details.

The project will not impact development: The project will have no impact on business development.

Note: **Each project is looked at on an individual basis to determine if any aspects of this category apply.**

7) **Matching Funds - LOCAL**

10 - This project is a loan or credit enhancement
(10) **– 50% or higher**
8 – 40% to 49.99%
6 – 30% to 39.99%
4 – 20% to 29.99%
2 – 10% to 19.99%
0 – Less than 10%

List total percentage of "Local" funds 50 **%**

Criterion 7 – Matching Funds – Local

The percentage of matching funds which come directly from the budget of the applying agency. Ten points shall be awarded if a loan request is at least 50% of the total project cost. (If the applying agency is not a user fee funded agency, any funds to be provided by a user fee generating agency will be considered "Matching Funds – Other").

8) Matching Funds – OTHER

List total percentage of "Other" funds 0 %

10 – 50% or higher
8 – 40% to 49.99%
6 – 30% to 39.99%
4 – 20% to 29.99%
2 – 10% to 19.99%
1 – 1% to 9.99%
(0) – Less than 1%

List below each funding source and percentage

_____ _____ %
_____ _____ %
_____ _____ %
_____ _____ %
_____ _____ %

Criterion 8 – Matching Funds - Other

The percentage of matching funds that come from funding sources other than those mentioned in Criterion 7. A letter from the outside funding agency stating their financial participation in the project and the amount of funding is required to receive points. For MRF, a copy of the current application form filed with the Hamilton County Engineer's Office meets the requirement.

9) **Will the project alleviate serious capacity problems or hazards or respond to the future level of service needs of the district?**

(10) **Project design is for future demand.**
(8) **Project design is for partial future demand.**
6 - Project design is for current demand.
4 - Project design is for minimal increase in capacity.
0 - Project design is for no increase in capacity.

Appeal Score

_____

Criterion 9 – Alleviate Capacity Problems

The applying agency shall provide a narrative, along with pertinent support documentation, which describe the existing deficiencies and showing how congestion will be reduced or eliminated and how service will be improved to meet the needs of any expected growth or development. A formal capacity analysis must accompany the application to receive more than 4 points. Projected traffic or demand should be calculated as follows:

Formula:

Existing volume x design year factor = projected volume

Design Year	Design year factor		
	Urban	Suburban	Rural
20	1.40	1.70	1.60
10	1.20	1.35	1.30

Definitions:

Future demand – Project will eliminate existing congestion or deficiencies and will provide sufficient capacity or service for twenty-year projected demand or fully developed area conditions. Justification must be supplied if the area is already largely developed or undevelopable and thus the projection factors used deviate from the above table.

Partial future demand – Project will eliminate existing congestion or deficiencies and will provide sufficient capacity or service for ten-year projected demand or partially developed area conditions. Justification must be supplied if the area is already largely developed or undevelopable and thus the projection factors used deviate from the above table.

Current demand – Project will eliminate existing congestion or deficiencies and will provide sufficient capacity or service only for existing demand and conditions.

Minimal increase – Project will reduce but not eliminate existing congestion or deficiencies and will provide a minimal but less than sufficient increase in existing capacity or service for existing demand and conditions.

No increase – Project will have no effect on existing congestion or deficiencies and provide no increase in capacity or service for existing demand and conditions.

10) **Readiness to Proceed - If SCIP/LTIP funds are granted, when would the construction contract be awarded?**

5 - Will be under contract by December 31, 2010 and no delinquent projects in Rounds 21 & 22
3 - Will be under contract by March 31, 2011 and/or one delinquent project in Rounds 21 & 22
0 - Will not be under contract by March 31, 2011 and/or more than one delinquent project in Rounds 21 & 22

Criterion 10 – Readiness to Proceed
The Support Staff will assign points based on engineering experience and status of design plans. A project is considered delinquent when it has not received a notice to proceed within the time stated on the original application and no time extension has been granted by the OPWC. An applying agency receiving approval for a project and subsequently canceling the same after the bid date on the application will receive zero (0) points under this round and the following round.

11) **Does the infrastructure have regional impact? Consider origination and destination of traffic, functional classifications, size of service area, and number of jurisdictions served, etc.**

10 – Major Impact **Appeal Score**
8 – Significant Impact
6 – Moderate Impact _____
4 – Minor Impact
2 – Minimal or No Impact

Criterion 11 - Regional Impact
The regional significance of the infrastructure that is being repaired or replaced.
Definitions:

Major Impact – Roads: Major Arterial: A direct connector to an Interstate Highway; Arterials are intended to provide a greater degree of mobility rather than land access. Arterials generally convey large traffic volumes for distances greater than one mile. A major arterial is a highway that is of regional importance and is intended to serve beyond the county. It may connect urban centers with one another and/or with outlying communities and employment or shopping centers. A major arterial is intended primarily to serve through traffic.

Significant Impact – Roads: Minor Arterial: A roadway, also serving through traffic, that is similar in function to a major arterial, but operates with lower traffic volumes, serves trips of shorter distances (but still greater than one mile), and may provide a higher degree of property access than do major arterials.

Moderate Impact – Roads: Major Collector: A roadway that provides for traffic movement between local roads/streets and arterials or community-wide activity centers and carries moderate traffic volumes over moderate distances (generally less than one mile). Major collectors may also provide direct access to abutting properties, such as regional shopping centers, large industrial parks, major subdivisions and community-wide recreational facilities, but typically not individual residences. Most major collectors are also county roads and are therefore through streets.

Minor Impact – Roads: Minor Collector: A roadway similar in functions to a major collector but which carries lower traffic volumes over shorter distances and has a higher degree of property access. Minor collectors may serve as main circulation streets within large, residential neighborhoods. Most minor collectors are also township roads and streets and may, or may not, be through streets.

Minimal or No Impact - Roads: Local: A roadway that is primarily intended to provide access to abutting properties. It tends to accommodate lower traffic volumes, serves short trips (generally within neighborhoods), and provides connections preferably only to collector streets rather than arterials.

12) **What is the overall economic health of the jurisdiction?**

10 Points
8 Points
(6) Points
4 Points
2 Points

Criterion 12 – Economic Health
The District 2 Integrating Committee predetermines the applying agency's economic health. The economic health of a jurisdiction may periodically be adjusted when census and other budgetary data are updated.

13) **Has any formal action by a federal, state, or local government agency resulted in a partial or complete ban of the usage or expansion of the usage for the involved infrastructure?**

10 - Complete ban, facility closed — **Appeal Score**
8 – 80% reduction in legal load or 4-wheeled vehicles only
7 – Moratorium on future development, *not* functioning for current demand — _____
6 – 60% reduction in legal load
5 - Moratorium on future development, functioning for current demand
4 – 40% reduction in legal load
2 – 20% reduction in legal load
(0) Less than 20% reduction in legal load

Criterion 13 - Ban
The applying agency shall provide documentation to show that a facility ban or moratorium has been formally placed. The ban or moratorium must have been caused by a structural or operational problem. Points will only be awarded if the end result of the project will cause the ban to be lifted.

14) **What is the total number of existing daily users that will benefit as a result of the proposed project?**

(10) - 30,000 or more — **Appeal Score**
8 - 21,000 to 29,999
6 - 12,000 to 20,999 — _____
4 - 3,000 to 11,999
2 - 2,999 and under

Criterion 14 - Users
The applying agency shall provide documentation. A registered Professional Engineer must certify (sign and seal) the appropriate documentation. Documentation may include current traffic counts, households served, when converted to a measurement of persons. Public transit users are permitted to be counted for the roads and bridges, but only when certifiable ridership figures are provided.

15) **Has the applying agency enacted the optional $5 license plate fee, an infrastructure levy, a user fee, or dedicated tax for the pertinent infrastructure? *(Provide documentation of which fees have been enacted.)***

(5) Two or more of the above — **Appeal Score**
3 - One of the above
0 - None of the above — _____

Criterion 15 – Fees, Levies, Etc.
The applying agency shall document (in the "Additional Support Information" form) which type of fees, levies or taxes they have dedicated toward the type of infrastructure being applied for. Bonds are not eligible for points in this category.